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business and economic review

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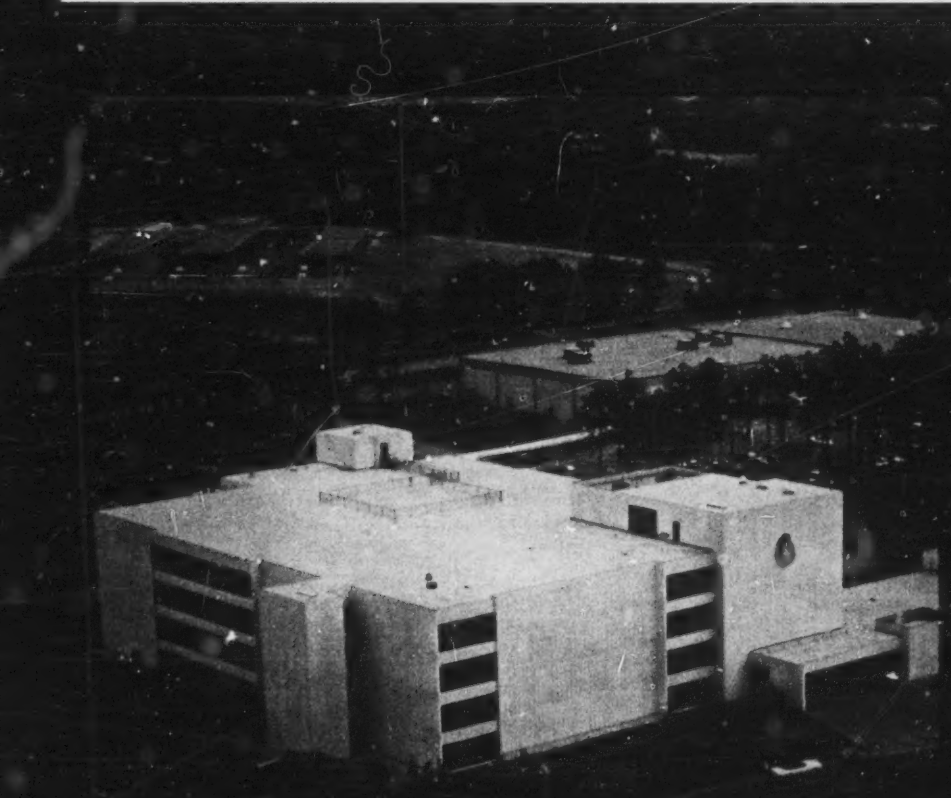

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13 According to **Finding More Customers for the Harvest of the Sea,** the average American is still a meat and potatoes consumer. Here Dr. Arch G. Woodside and Katherine O. Moore of The University of South Carolina's College of Business Administration take a close look at an alternative consideration in this state, seafood consumption, and suggest some ways that market could be expanded.

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This month's cover. Colonial Life's new building illustrates the national success of a South Carolina company, founded and guided by South Carolinians. For an article on institutional money management by that company's Senior Vice-President, see page 3, this issue.

Managing Institutional Money in the 1980's

By Frank Sumner Smith, Jr.

Many events within the financial and capital markets during the past two and a half years are without precedent. Inflation and interest rates reached double digit levels. Capital market volatility was the rule rather than the exception. A recession, long expected in the 1970's, finally occurred — not once, but twice. Corporate balance sheets reached dangerously low levels of liquidity. High interest rates rendered long-term bond holdings virtually illiquid as market prices deteriorated by 25-50 percent. In such a climate, the management of an institutional investment portfolio has become increasingly difficult.

The absolute level of interest rates has been remarkable, as well as the speed with which these rates have fluctuated. In the just two and a half years since the beginning of the 1980's, short-term Treasury Bill yields (three months) have traveled a sporadic course between 6.31 percent and 18.11 percent. Long-term Treasury Bond yields (30 years) have also experienced a wide range of movement, between 9.47 percent and 15.20 percent.

The common stock market has suffered price volatility, although to a degree uncharacteristically less than that of the bond market. Stock prices on balance have declined with the economic downturn. This decline in common stock prices has been exacerbated by the high level of interest rates. Interest rates have affected stock values in two ways: corporate profit margins have been squeezed by high interest costs on growing corporate debt, and investors have demanded total returns from common stocks at some premium above the high levels of return available in the fixed income markets.

The cause and effect of these volcanic events of the early 1980's has been a high level of inflation. To assess the prospective financial markets, one must consider not only the future course of inflation but also the effects of the federal government's attempted cures. The present economic outlook is unusually cloudy and probably more challenging than ever to forecast.

There are many factors to be considered in formulating an investment strategy under present economic circumstances. These factors must be evaluated by any institutional portfolio manager. The specific strategies undertaken may vary widely from institution to institution, depending on their respective objectives and risk tolerances, and other unique factors. Among the key economic concepts that should be evaluated and, to some extent forecast, in all cases are:

- Inflation
- Interest Rates
- Federal Deficits
- Fiscal-Monetary Policy
- Economic Recovery Tax Act
- Volatility of Capital Markets
- Credit Risks
- Productivity
- Employment and Demographics
- Changing Industrial Base

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INFLATION

The future course of inflation is probably the most compelling of the economic considerations of investment strategy. During the past five years, the rate of price inflation has been driven by the classic elements of excess demand (demand/pull), escalating costs of production (cost/push), and politically imposed supply constraints.

The effects of demand/pull inflation are principally attributable to the policies of the federal government which have favored consumption over production. As prices have been forced up by excess demand, sizable wage increases have been necessary to adjust consumer income to escalating price levels. Rising wages in turn have been passed along in the form of higher prices. Since the level of demand was already stimulated beyond the economy's capacity to produce, there has been little resistance to price increases by individual or business consumers. The ease with which prices and wages have been permitted to increase without any change in the quantity of goods and services demanded is central to the "borrow and buy today" psychology which serves to reinforce fundamental inflationary factors within the economy. The influence of rising demand and cost has been emphasized further by rapid changes in the price of major commodities such as food and oil.

Expectations for inflation during the remainder of this decade should be tempered by recent history. Since the advent of rising prices approximately 18 years ago, each cycle of inflation has tended to higher peaks and valleys in price change level than each preceding cycle. For 1982 to date, the effects of inflation have been substantially ameliorated, and price levels in a number of sectors have moved from inflation to deflation. This welcome dampening of price changes has been due, in part, to a declining economy which has forced inventory liquidation, rising unemployment, and at least a temporary abatement in the demand for large wage increases. A key consideration in future investment strategy is the degree of pent-up consumer and business demand for goods and services foregone in past periods. As recession abates and recovery becomes evident, the effects of pent-up demand satisfaction and the impact on future price levels remain unknowns.

INTEREST RATES

Interest rates, which represent the price of money, are determined by the same factors that lead to a market price for any commodity, that is, the level of demand and supply. Forecasting the various elements of demand for money and the factors influencing the supply of money is the essence of fixed income investing and, by inference, equity investing.

The economy is completing a full year of the second recession of this decade. Despite this, interest rates, although down from their peaks, remain stubbornly high. Apparent fears of a resurgence in the levels of inflation continue to make investors cautious about committing long-term capital at fixed rates. A growing number of investors demand either variable rates or short- to intermediate-term instruments. This demand was reflected in corporate bond issuance during 1981 when 50 percent of bonds sold were medium-term maturities and only 36 percent were long-term maturities. By comparison, long-term debt comprised 82 percent of the total in 1977 and medium-term debt only 16 percent.

In addition to the cautious attitudes of investors, the burgeoning level of federal government borrowings has also contributed substantially to stubbornly high interest rates. Since the federal government does not time its borrowings to market conditions but pays the rate necessary to meet its debt requirements as they arise, when those borrowings are high, other borrowers are crowded out of the market, thereby establishing increased competition for funds. This, in turn, results in continued high interest rates.

Thus far during the 1980's, heavy U.S. Treasury borrowing in pursuit of a stimulative fiscal policy has run head-on into a generally restrictive monetary policy, to contribute further to interest rate pressures. Money managers are required to forecast a course for interest rates in the midst of these contradictory policies. An attendant issue is whether or not short-term credit demands will ease if business activity remains soft, or recede as a result of improved corporate cash flows in an improving economy.

It appears clear that if interest rates are to sustain a downward move, demand for funding from either the private or government sector must abate. The future course of interest rates will be critically affected by the level of Treasury borrowing needed to fund federal government deficits.

FEDERAL DEFICITS

For the past 10 years, each succeeding Administration has promised to bring the budget into balance. Whatever the merits of the undertakings to accomplish this end, the results have been an

ever increasing annual federal deficit. The Reagan Administration has recently revised its 1982 anticipated budget deficit upward to $100.5 billion. Some private economists estimate this figure to be $110 to $120 billion. Private economists project the deficit in fiscal 1983 to be as high as $150 to $180 billion. Expectations that the federal budget can be balanced during the decade of the 1980's have been dampened by budget events of the past two and a half years.

In assessing the future course of federal deficits, it is sobering to realize that the overwhelming percentage of federal expenditures is fixed by countless federal laws not easily changed. The growing size of the federal deficit and the current cost of borrowing leads to an increasing share of federal expenditures allotted to debt service which, in turn, drives up the overall level of federal spending.

FISCAL-MONETARY POLICY

The Employment Act of 1946 states in part that "the Congress declares that it is the continued responsibility of the Federal Government to . . . promote maximum employment, production, and purchasing power." Although desirable goals, the principal concern must be the price of their attainment.

For the past 20 years, it has been the espoused policy of Congress to seek the highest level of employment and to provide growing benefits for the unemployed. This objective has been pursued in spite of its inflationary impact and the pressures placed on interest rates and capital markets.

The Federal Reserve Board has been left alone to battle inflation. A "stop and go" pattern of economic activity has developed. Strength in economic activity is met by a restrictive monetary policy causing interest rates to rise and business and consumer spending to wane. As the economy slows and unemployment rises, fiscal and monetary policies begin to expand and thereby increase demand and stimulate the economy.

The rapid changes that have occurred in interest rates and in the availability of long-term funding have severely retarded capital formation and the ability of business to plan for growth. Stronger real economic growth and lasting progress against inflation require a more balanced and consistently applied fiscal and monetary policy for the remainder of this decade. The money manager should assess the likelihood and impact of such a development.

ECONOMIC RECOVERY TAX ACT OF 1981

The underlying rationale behind the Economic Recovery Tax Act of 1981 has its genesis in classic supply-side economic theory. This is in marked contrast to the demand-side policies integral to the Johnson, Nixon, Ford, and Carter Administrations. The most recent national attempt to affect the economy by supply-side economic theory was during the Kennedy Administration in the early 1960's. At that time, investment tax credits, revised depreciation rules, reduction in corporate and individual tax rates, and investment incentives were prescribed as the tonic for an expanding economy. The success of that experiment is subject to debate; however, the acceleration of the Viet Nam conflict and its attendant requirements for support impacted the supply-side effort before its full effects could be measured.

The Economic Recovery Tax Act of 1981 provides for reduced levels of corporate and individual taxes and more attractive investment tax credits and depreciation rules, as well as inducements to save and invest. The success of this program must be measured over time and considered in light of the obstacles faced because of inflation, the current level of interest rates, and federal budget deficits.

VOLATILITY OF CAPITAL MARKETS

Inflation, international tensions, budget deficits, strained corporate balance sheets, and other uncertainties have produced extreme volatility in both the bond and stock markets. A monetary policy geared to a finite money supply target rather than to a level of interest rates without smoothing transition periods has greatly influenced market volatility. The perceived ability of financial institutions to hedge or pass along interest rate risk has compounded further the problem of market volatility. The highly illiquid position of corporate America, with the attendant dependence on short-term debt, has also been a contributing factor. To solve corporate illiquidity by funding short-term debt into long-term debt, massive financing would be required in the balance of the 1980's.

A recently published study by James McKeon of Salomon Brothers, Inc. estimates that to return the ratio of long-term debt to short-term debt to 1.9, its last cyclical high, would require corporations to raise a net of about $50 billion in the commercial mortgage market, $17 billion in the industrial tax exempt market, and $100 billion in the corporate bond market. McKeon's study shows that in the full year 1981, only $21 billion was raised in the

commercial mortgage market, $4 billion in the industrial tax exempt market, and $18 billion in the corporate bond market. A growing federal budget deficit further complicates such a process.

The unsatisfied need for long-term real estate mortgage financing is unknown, but appears sizable. This future demand, added to the need to finance auto and other consumer purchases, promises to compete for available supplies of funds as demands from the federal government and business may subside. Therefore, money managers should consider the ability of capital markets to meet anticipated future demands in a stable and orderly manner. Failure to do so may mean capital market volatility for some years in the future.

CREDIT RISKS

Appraising economic expectations to develop investment plans requires an examination of various risk elements. One such risk element is credit worthiness.

With the spectacular exceptions of Penn Central, W. T. Grant & Co., and Franklin National Bank during the 1970's and more recently of Braniff International, the Wickes Corporation, and a number of savings institutions, the United States economy has been relatively blessed by few major business failures since World War II. Because preservation of principal and liquidity is essential to successful investing, a study of the economy should include an indepth review of changes in credit worthiness of United States business corporations.

In recent months investors have adopted an ultraconservative stance with a premium on credit quality. This position has created difficulties for all but the highest rated corporations in funding growing short-term debt into long-term obligations. The result has been a widening yield spread among various credit sectors. A number of corporations, involuntarily, increased short-term debt to total debt. This has prompted bond rating agencies to downgrade more corporate issuers than those upgraded. This is an understandable development since the ratio of corporate long-term debt to short-term debt now stands at approximately 1.4 to 1.0 as compared to the traditional level of 2.5 to 1.0 for the post-World War II era.

Shrinking profit margins in a number of industries, high interest rates and the attendant increase in debt service costs, inflation, and the effect of business bankruptcies on other related businesses are influencing the high level of short-term debt. Currently, the rate of voluntary and involuntary bankruptcies has reached a record high for the post-World War II era. Given the high level of financial market volatility and the preference for quality of credit worthiness, future marketability of certain investments may be questionable if financial conditions continue to deteriorate.

PRODUCTIVITY

Essential to investment planning for the remainder of the 1980's is the ability of the United States to compete in world markets. United States plant and equipment has deteriorated primarily because of a low incentive to commit long-term, low cost capital during the past 20 years. Whatever the reasons, a growing proportion of the domestic market for such items as autos, steel, and electrical applicances has been taken by imports. Just 20 years ago, the United States was the predominant force in marketing such items. Low cost labor in the Far East has allowed expansion into product lines for which the United States was once considered the major supplier.

To maintain desired economic levels and balance of payment equilibrium and to be an important factor in world markets, the United States must reaffirm its leadership as an exporter of goods and services and reduce its dependence on imports. To attain this position, it must have significant investment in plant and equipment and research and development, marketing skills, and price competitiveness. Economic projections need to assess the United States' willingness and ability to deliver the ingredients necessary to reach this position.

The tax deferral opportunities offered by expanded Individual Retirement Accounts and the Keogh Plan have the potential to build a reservoir of savings convertible into long-term, reasonably priced capital. Liberalized depreciation rules and investment tax credits can improve internally generated cash flows, allowing United States business over time to meet capital needs from these flows with less dependence on external sources of capital.

EMPLOYMENT AND DEMOGRAPHICS

In the current economic downturn, unemployment has risen to 9.5 percent of the labor force, or approximately 10 million workers. This represents the highest level of unemployment in the post-

World War II era. Ameliorating that sobering statistic, however, the number of persons employed is at an all-time high, ranking only below the historic figure reached during 1980. While current levels of unemployment will act to deter a sustainable economic recovery, the high number of persons employed still constitutes a massive foundation of income for consumer expenditures.

The "Baby Boom" covering the period from the end of World War II to approximately 1959 has matured and is now part of, or seeks to be a part of, the labor force. These adults represent the largest and best educated entry into the work force in the history of the United States, with the potential for productivity and technological advances.

As stated earlier, intense wage demands made during periods of rising inflation and fuller employment levels have translated into increased pressures on the price structure. The state of the economy and particularly rising unemployment levels are resulting in lowered wage level demands and the potential for increased productivity per worker. This circumstance may improve productivity during the coming years until the demand for workers reaches into the pool of marginal labor. However, the lowered birth rate since 1960 eventually will tighten the future supply of labor. Assuming a continued incremental rise in consumption, the demand for labor could become more competitive with an attendant impact on wage costs.

For at least 15 years, there has been a distinct movement of population and labor force from the Northeast to the Sunbelt states and Far West. More recently, the conditions in the automobile and related industries, energy costs, the compressed profit margins of agriculture, and other factors have prompted movement of labor segments from the Mid-West into the Sunbelt states. The future effects of these shifts in the labor force is difficult to assess. It appears clear that the United States is not likely to enjoy a homogeneous economy; some areas will prosper while others will suffer economically.

CHANGING INDUSTRIAL BASE

Industrial investments of capital and labor are made in the expectation of future return. Current assumptions of future growth or the role of various United States industries may face revolutionary changes during the remainder of this decade. White-collar jobs now outnumber blue-collar positions by a five to three margin. Only 21 percent of the labor force is employed in manufacturing which is less than the number employed in wholesaling and retailing. Agriculture once accounted for a high proportion of the labor force; today it employs less than 5 percent of the labor force. The statistics herein are taken from an article appearing in the June 14, 1982, issue of **Fortune** magazine* which states that fewer people are currently employed in the auto, steel, textile, and leather industries than during the bottom of the 1975 recession.

Prior to 1970, cyclical upturns in the United States economy were led by the steel and auto industries. Recoveries were sustained by a subsequent increase in business and consumer spending. Numerous factors contribute to the private depression currently suffered by some basic industries. Important to the depressed state of these industries is a growing United States dependence on foreign trade. In 1964, for example, approximately 1 of every 14 manufacturing workers produced goods for export, and that number has now moved to 1 in every 6. However, imports continue to grow as a percentage of total sales of numerous products as foreign producers have competed more aggressively for a share of the United States market. In the auto and steel industries, for example, plant and equipment in Japan and West Germany is newer and more efficient than in the United States, and areas such as South Korea offer pools of low-cost labor. This appears to have had a substantial effect on the shift in the United States economy from an industrial to a growing service base.

FORMULATING STRATEGY

The formulation of an effective investment strategy requires the assessment of many economic conditions that change rapidly. Judgments of the future course of these economic factors need to be made. Successful analysis frequently requires that each element considered in the economic outlook be reduced to sub-elements for more detailed study. Generally, a successful investment strategy must be evolutionary and responsive to change, must never be static, and should rarely be revolutionary.

It is not possible to prescribe investment strategy. However, by considering external factors, judgments are possible when the individual portfolio manager recognizes and deals with numerous internal factors peculiar to that particular institution. Because of these internal considerations, two portfolio managers having exactly the same economic and financial outlook may develop very

*Robert Lubar, "Why Unemployment Will Hang High," pp. 114-120.

different investment strategies. Investment objectives for varying pools of funds are typically quite different. The degree of risk tolerance also varies from organization to organization. Many institutions operate under certain statutory constraints. Cash flow patterns are different, and tax considerations vary. The essence of the portfolio manager's objective is a successful blending of judgments regarding the future course of economic activity and financial markets and these unique internal considerations.

The formulation of investment strategy today is far more complex than in past years, and the method by which a strategy is implemented also has become a more complex decision due to a vast array of choices of investment vehicles. Before this current period of financial turbulence, a manager's choices were relatively simple. To meet his investment objectives, he could choose from traditional investments which were, in retrospect, extremely stable markets. United States government obligations, corporate bonds, municipal bonds, mortgages, interest bearing bank accounts, common and preferred stock, and, to a much lesser extent, real estate comprised his shopping list. Today the economic and financial conditions previously described have led to a plethora of new investment vehicles. Many are fashioned to appeal to a particular type of investing entity, while others are designed to reduce risk to the investor over time or to provide the possibility of enhanced future returns to induce longer term commitment. The list of new or substantially modified investment media changes every day but includes such things as original issue discount and zero coupon bonds, financial and stock index futures, floating and variable rate bonds, coupon compounded bonds, and a greatly expanded listed market for put and call options. The need for capital in the private sector practically assures the development of additional financial instruments. While the fiduciary nature of most portfolio management dictates caution in utilizing these new instruments, an effective investment strategy for the 1980's will require an ability to select from new instruments to limit risk, enhance returns, and reach investment goals.

The one constant in money management is the quest to earn a desired rate of return while preserving the integrity of investment principal. The late 1980's will look back on turbulence, volatility, economic changes, and an array of new aspects to change unquestionably the rules and criteria by which investment performance is measured.

South Carolina County Retail Trade Patterns

By J. Dennis Lord and Charlotte Hinson

INTRODUCTION

Retail trade contributes to an area's economy in several ways. First, retailing is an important source of local employment and income. Second, retail trade and its facilities generate sales tax and property tax revenues that are used to provide necessary public services.[1] Thus the local economy suffers when residents make purchases outside

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Ms. Charlotte Hinson is a candidate for the Master of Arts Degree in Geography at The University of North Carolina at Charlotte. She also holds a B.A. Degree in Sociology from UNCC.

[1]William T. Boehm and Martin T. Pond, "Job Location, Retail Purchasing Patterns, and Local Economic Development," **Growth and Change** 7 (January 1976): 7-12.

their community or local trading area. The result is both the exportation of retail dollars from one area to another, or "retail leakage," and the associated losses of jobs and sales and property tax revenues.

In a given area, two types of nonresident purchasing can exist: (1) those by tourists or visitors and (2) those by persons living in nearby areas. This second type is referred to as "outshopping." In some cases, outshopping involves a trip to another area for the specific purpose of shopping. In others, the purchasers are in other communities for different reasons, such as work or entertainment.

Several studies have been conducted on outshopping behavior. Many of these have examined demographic and psychographic characteristics of outshoppers. Although there are some conflicting findings, it is generally accepted that **higher incomes and younger ages distinguish outshoppers from nonoutshoppers.[2] The primary attitudinal variable in outshopping is consumer dissatisfaction with local retailing opportunities and a desire for greater selection of merchandise.[3] It is small towns, especially those close to larger retail markets, that are particularly vulnerable to outshopping because of their more limited selection of retailing opportunities.[4]**

In this present article the authors examine inflow and outflow retail trade patterns for South Carolina counties. They use a simple index to determine the magnitude of each county's net inflow or outflow of retail dollars due to retail leakage and nonresident purchasing, and estimate the absolute dollar amount of the net inflow or outflow of retail trade.

METHODOLOGY

The following net inflow/outflow retail sales index is employed:

$$NI_i \text{ or } NO_i = RSPC_i/EBIPC_i$$

where

NI_i or NO_i = the net inflow or outflow index for county i

$RSPC_i$ = the retail sales per capita in county i

$EBIPC_i$ = the effective buying income per capita in county i

This index reflects the relationship that commonly exists between the income level of an area's population and the amount of retail sales in that area. In this study, a correlation of +.66 exists between retail sales per capita and effective buying income per capita for South Carolina's 46 counties. A significant proportion of the variance in per capita retail sales that is not associated with per capita effective buying income can be attributed to nonresident purchasing in a county or retail leakage from the county.

An index that represents a closed retail system or a condition of balanced inflows and outflows is needed in order to determine whether a county is experiencing a net inflow or outflow of retail dollars. The ratio of per capita retail sales to per capita effective buying income for the entire state of South Carolina is used as the basis for distinguishing net inflow and outflow counties. Although, admittedly, states are not entirely closed systems in terms of retail trade, they do more closely approximate a closed system or a balance of inflows and outflows than do counties. Thus the state's ratio of RSPC to EBIPC of .581 is used to categorize counties. Counties with values greater than .581 are considered to be net inflow counties while those with values less than .581 are labeled as net outflow areas. Thus the departure of a county's ratio from the state value of .581 is interpreted as an indication of the county's level of departure from a balance of inflows and outflows.

Data for this study were obtained from the annual "Survey of Buying Power" published by **Sales and Marketing Management** magazine.[5] Figures on each county's population, total retail sales, and effective buying income for the year 1980 were included. Per capita values for retail sales and effective buying income were then computed in order to calculate the net inflow/outflow index.

NET INFLOW AND OUTFLOW PATTERNS

Information on the effective buying income and inflow/outflow retail trade patterns is useful in determining whether a market area (such as a county) can support additional retail facilities. An example follows.

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[2]N. G. Papadopoulos, "Consumer Outshopping Research: Review and Extension," **Journal of Retailing** 56 (Winter 1980): 41-58.

[3]See John Hiltner and Bruce W. Smith, "Outshopping to a Nearby Metropolitan Center," **Proceedings of the Association of American Geographers** 8 (April 1976): 92-95; and Fred D. Reynolds and William R. Darden, "Intermarket Patronage: A Psychographic Study of Consumer Outshoppers," **Journal of Marketing** 36 (October 1972): 50-54.

[4]Charles M. Lillis and Delbert I. Hawkins, "Retail Expenditure Flows in Contiguous Trade Areas," **Journal of Retailing** 50 (Summer 1974): 30-42.

[5]"Survey of Buying Power," **Sales and Marketing Management** (27 July 1981): C-186 and 188.

Assume that an individual is interested in opening a supermarket in a particular county (referred to in this hypothetical illustration as Smith County). The feasibility question revolves largely around the issue of the demand for that type of retail function in the market area compared to the degree to which the market is currently stored with the retail establishment. Total effective buying income is a measure of the total expenditure potential of residents in the market area. However, as noted in this article, consideration of the effective buying income of only county residents could result in either an over- or underestimation of the EBI available in the market because of inflow and outflow or retail sales.

For purposes of illustration assume that the total EBI of Smith County residents is $500,000,000. If we use the South Carolina state ratio of retail sales to EBI of .581, this would indicate that the retail expenditures of county residents would be $290,500,000. However, only a portion of this amount would represent supermarket expenditures. Let us assume that 20 percent of total retail expenditures are accounted for by supermarkets. This would indicate that $58,100,000 is available in the market for supermarket expenditures. Further, suppose that there is a net flow of supermarket expenditures in Smith County equal to 25 percent of the supermarket expenditure potential of county residents. This figure would be $14,525,000. Therefore, the total supermarket expenditure in the market area is $72,625,000.

A survey of supermarket facilities in Smith County reveals that the market is currently supplied with 13 stores which contain a total floorspace of 260,500 square feet. A critical consideration in the assessment of market feasibility relates to sales per square feet. Assume that an annual sales of $250 per square foot represents a threshold level for market feasibility. If the supermarket expenditure potential of the market ($72,625,000) is divided by the threshold sales requirement ($250 per square foot), the results show that the market can support a total floorspace of 290,500 square foot at the threshold or break-even level. Since the market currently has only 260,500 square foot, it can be seen that the area could absorb an additional 30,000 square foot before the market as a whole would be at the break-even or saturation level. Given an average size store of perhaps 20,000 square foot, and assuming that a suitable site could be found and that the new store could be competitive in terms of price, quality, and variety of merchandise, the market would seem to represent a good opportunity for a new facility.

The net inflow and outflow retail trade counties in South Carolina are shown in Figure 1. There were 18 counties with a net inflow of retail dollars while 28 counties experienced a net outflow or loss of retail trade (Table 1). The index values ranged from .908 for Horry County to .293 for Berkeley County, compared with the state value of .581.

The location of major cities and tourist attractions is closely related to the pattern of inflows (Figure 2). In fact, inflow counties fall into three categories: (1) those containing large cities relative to the size of cities in surrounding counties (larger cities generally have a greater variety of merchandise and shopping opportunities, thereby attracting outshoppers) (2) those whose inflows are due to tourists or visitors and (3) those whose sales are inflated due to both of the above factors, i.e., outshopping and tourism.

The importance of town size and spacing can be seen in the net inflow and outflow patterns. For example, Richland County contains the state's largest city and capital, Columbia. Richland County's index value is .602, indicating an inflow of retail dollars. This figure might be somewhat larger if expenditures made at Fort Jackson were included in the county's total retail sales. The four surrounding counties of Calhoun, Lexington, Fairfield, and Kershaw show significant outflows with index values of .312, .463, .450, and .461, respectively. The inflow counties of Spartanburg and Anderson contain the cities of Spartanburg and Anderson. They are adjacent to the outflow counties of Union, Laurens, Abbeville, and Oconee which contain smaller urban places. Florence, Sumter, Clarendon, and Dillon, surrounded by outflow counties, comprise a cluster of inflow

FIGURE 1. Net Inflow and Outflow Counties in South Carolina

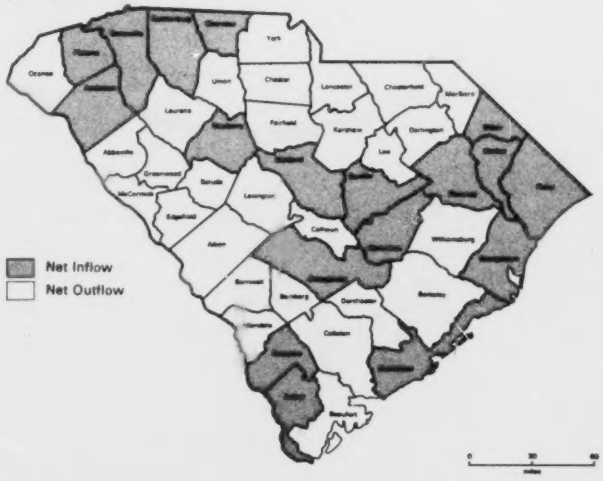


TABLE 1. Net Inflow and Outflow Index Values for South Carolina Counties

Net Inflow Counties	Inflow Index	Net Outflow Counties	Outflow Index
Horry	.908	Berkeley	.293
Jasper	.799	Lee	.295
Clarendon	.764	Saluda	.302
Hampton	.698	Calhoun	.312
Dillon	.680	Abbeville	.331
Florence	.679	McCormick	.335
Anderson	.661	Laurens	.416
Charleston	.659	Edgefield	.417
Orangeburg	.653	Aiken	.439
Spartanburg	.648	Fairfield	.450
Sumter	.643	Kershaw	.461
Georgetown	.616	Lexington	.463
Newberry	.615	Darlington	.466
Richland	.602	Chester	.476
Marion	.598	Union	.479
Greenville	.598	Chesterfield	.489
Pickens	.588	Colleton	.493
Cherokee	.583	Barnwell	.494
		Bamberg	.512
		Beaufort	.518
		Allendale	.533
		York	.535
		Marlboro	.546
		Dorchester	.555
		Oconee	.557
		Williamsburg	.560
		Greenwood	.565
		Lancaster	.577

counties containing relatively large cities. Since Interstate 95 passes through Dillon, Florence, and Clarendon Counties, expenditures by travelers may help inflate their retail sales. Finally, Newberry and Orangeburg Counties contain relatively large, isolated cities (Newberry and Orangeburg) which appear to attract customers from Fairfield, Union, Laurens, Saluda, Calhoun, Lexington, Aiken, Barnwell, and Bamberg Counties.

Charleston is an example of a county whose retail sales are inflated due to both outshopping and tourism. The city of Charleston is one of the state's leading tourist centers. Furthermore, Charleston County is surrounded by several smaller population counties that show significant outflows of retail dollars, especially Berkeley County with the smallest index value in the state.

Horry County best illustrates the impact of tourism on an area's retail sales. No doubt Myrtle Beach is a principal reason for Horry County's leading index value of .908. Georgetown County exhibits a net inflow of retail sales which also may be due in part to expenditures by visitors.

Beaufort County's low index value is rather surprising, especially considering its tourist attraction of Hilton Head Island. This situation could be due to two factors that would work to deflate the index value. (1) Beaufort County contains a large military installation, and retail sales on military installations are not included in the retail trade statistics. (2) The income level of the area may be inflated by the presence of a high income population group on Hilton Head Island. It is likely that this group makes significant purchases in the nearby metropolitan area of Savannah, Georgia.

The inflow status of Jasper and Hampton Counties is something of a puzzle. Neither county has a large urban center or a major tourist attraction. In fact, one would expect Jasper County actually to lose retail dollars to its neighbor, Savannah, Georgia. However, the net inflow/outflow index is very sensitive for counties with small populations and low income levels which characterizes both Jasper and Hampton Counties. A small dollar volume of inflow of retail trade to such areas would have a considerable impact on the ratio of retail sales to effective buying income.

ABSOLUTE VOLUME OF NET INFLOWS AND OUTFLOWS

The inflow/outflow index is a measure of the net inflow or outflow relative to the effective buying income of the county's residents and thus is a very sensitive measure for those counties with small populations and incomes. A second method was employed to measure the absolute dollar

FIGURE 2. Location of Selected Cities in South Carolina

volume of net inflows and outflows. First, a county's effective buying income was multiplied by the ratio of the state's retail sales to its effective buying income. This calculation provided an estimate of the county's expected sales in a closed system, or a situation in which inflows and outflows were balanced. This estimated sales figure was then compared with the county's actual retail sales. The absolute volume of net inflow or outflow was measured as the difference between actual and expected sales (Table 2).

TABLE 2. Absolute Volumes of Net Inflow and Outflow for Selected South Carolina Counties

Net Inflow Counties		
County	**Net Inflow**	**Inflow as a Percentage of Actual Retail Sales**
Horry	$213,705,500	36.0%
Charleston	146,209,400	11.8
Spartanburg	91,635,600	10.4
Anderson	69,284,600	12.1
Florence	68,623,200	14.4
Richland	42,735,401	3.0
Greenville	36,187,800	3.0
Sumter	30,669,345	10.0
Orangeburg	30,112,521	11.0

Net Outflow Counties		
County	**Net Outflow**	**Ratio of Outflow to Actual Retail Sales**
Berkeley	$145,691,900	.98
Lexington	113,404,700	.26
Aiken	111,782,900	.32
Laurens	52,308,600	.40
Darlington	40,863,200	.25
York	33,124,100	.09
Abbeville	31,676,400	.75
Kershaw	30,755,700	.26
Beaufort	30,049,000	.12

Berkeley County is a good illustration of the impact of retail leakage on an area's local economy. Actual retail sales in Berkeley County were $148,121,000 in 1980. By comparison, the retail expenditure potential of its residents was estimated to be $293,812,900. These figures suggest a net outflow of $145,691,900 in retail sales. Certainly this volume of retail trade leakage represents a significant loss in sales tax revenues and property tax.

In addition to Berkeley County, both Lexington and Aiken Counties also experienced net outflows in excess of $100 million in 1980. Although all three of these counties contain sizable populations and total incomes, they are located in close proximity to much larger counties that contain the major central city of an SMSA. It is apparent that leakage occurs from Berkeley to Charleston while Lexington leaks to Columbia and Aiken to Augusta, Georgia.

Certainly it is not surprising to those people familiar with the South Carolina economy that Horry was the largest net inflow county. It is of interest to determine the magnitude of the net inflow. Actual retail sales in Horry were $593,274,000 compared with an expenditure potential of its residents of $379,568,500. These figures reveal a net inflow in excess of $213,000,000 which indicates that approximately 36 percent of the retail economy of Horry County is supported by expenditures from nonresidents. Most of this spending is accounted for by tourists or visitors to the Myrtle Beach area. Myrtle Beach also acts as a regional trade center for northeast South Carolina and southeast North Carolina. The metropolitan counties of Charleston and Spartanburg rank second and third in absolute volume of net inflow, with values of $146,209,400 and $91,635,600, respectively.

CONCLUSIONS

The preceding analysis has indicated that many counties in South Carolina experienced loss of retail trade and sales and property tax revenues. Thus strategies to curb these leakages could result in significant benefits to local communities.

Because the primary reason for outshopping is a dissatisfaction with the local retailing facilities and a desire for a greater variety of merchandise selection, the most apparent option is to improve and increase local retailing opportunities. Unfortunately, many small communities do not have the population or buying power to support some types of retail facilities, and consumers must of necessity go elsewhere. There are other instances, however, in which improvements in the local retail environment can be made that could have some effect on reducing leakage. For example, a planned shopping center could represent an overall benefit to a county despite some adverse effect on the downtowns of small towns. There is also some evidence that efforts to increase the employment base in a community can have a real benefit on the retail economy.[6] People employed outside their local community tend to make fewer local purchases than those who both live and work in the community. Finally, the loss of sales tax revenues could be mitigated by implementing a sales tax system in which sales taxes do not accrue to counties based on the point of sale but rather on the point of consumption.

[6]Boehm and Pond, "Job Location."

Finding More Customers for the Harvest of the Sea

By Arch G. Woodside and Katherine O. Moore[1]

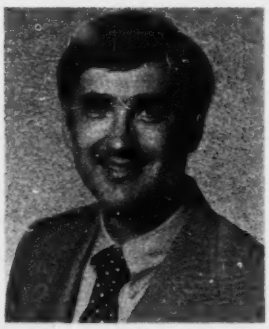
Seafood consumption in the United States is 10 times **less** than red meat consumption. In 1978, the average American ate 13 pounds of seafood, 149 pounds of red meat, and 57 pounds of poultry.

The seafood industry in South Carolina reflects the national consumption pattern. The landed value, or the revenues received at dockside by fishermen, of the state seafood industry was less than $21,000,000 in 1979.[2] This figure was less than the value of the tomato crop in Charleston County alone.[3]

Fresh and frozen fish consumption is increasing in the United States, however. Consumption rose by 42 percent between 1960 (5.7 lbs./person) and 1976 (8.1 lbs./person).[4] Canned tuna consumption increased from 0.2 lbs./person in 1926 to 3.1 lbs./person in 1974, a growth of 1,500 percent.

Even though the market for seafood is small compared with the markets for red meat and poultry, the revenues produced from commercial seafood can be substantial for a given state. For example, commercial catfish have become so popular in the South and the Midwest that they now represent Mississippi's fourth largest crop. The Delta flatland's output makes up 80 percent of the nation's catfish production and is expected to yield the state $100 million in revenue next year, up from the current $60 million annual rate.[5]

In this article the authors report on the fresh seafood consumption behavior of a sample of households representative of South Carolina's population. Demographic and consumer behavior profiles of the heavy consumer, light consumer, and nonconsumer of fresh seafood are provided. Such profiles are useful in planning marketing strategies to influence level of consumption and choice of products. Surprisingly, a search of the literature provided no information on the heavy versus light fresh seafood consumer in the United States.



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Mrs. Katherine O. Moore is a second-year M.B.A. candidate in the College of Business Administration at The University of South Carolina. She graduated with a B.S. Degree in Sociology (with highest honors) from Tarleton State University.

[1]Work on data collection for this study by Bryan Allen, Dan McVicker, Steve Sirbaugh, and Karen Whaley is gratefully acknowledged.

[2]**South Carolina Annual Landings 1979** (Charleston: South Carolina Wildlife and Marine Resources Department, 24 October 1980).

[3]Personal letter from William H. Lacey III, Supervisor, Seafood Marketing Services Section, South Carolina Wildlife and Marine Resources Department, to Arch G. Woodside, 16 October 1981.

[4]U. S., Department of Agriculture, **Food Consumption, Prices, and Expenditures** (Washington, D. C.: Government Printing Office, 1977).

[5]Nancy Nusser, "Riddle: What Is Used To Help Smell Out Purloined Catfish?" **Wallstreet Journal,** 3 September 1981, p. 1.

Going shopping. (Photo by Bill Edmonds, Coastal Carolina College.)

METHOD

A two-page questionnaire on fresh seafood consumption was mailed in early June 1980 to 425 members of The University of South Carolina's Consumer Panel. At the July 8 cutoff date, 305 usable responses had been returned (72 percent).

The panel's demographic profile generally reflects characteristics of households representative of South Carolina residents with gross annual incomes of over $5,000. The panel is slightly upscale for the state as a whole in terms of education, job type, and income when compared with available Bureau of the Census averages. When only urban households with annual incomes in excess of $5,000 are considered, however, the panel profile resembles that of the population rather closely.

The questionnaire used here was refined from discussions with persons knowledgeable of the seafood industry. Paul Van Steenbergen, Marketing Director of the South Carolina Marine Resources Division, provided suggestions for improving the questionnaire.

"Fresh seafood" was defined at the beginning of the questionnaire as "fresh seafood — not frozen, not processed, and not boxed fish (like Mrs. Paul's)." Respondents were asked whether or not they ate fresh seafood at home in May and, if so, what types. (The respondents were asked specifically about their consumption behavior in May to reduce recall problems.) Respondents were also asked where they usually obtained seafood and whether fresh seafood was available in the supermarkets where they shopped. In several questions, respondents were asked to compare the cost and taste of fresh seafood purchased in supermarkets and that purchased in fish markets. One question required respondents to list the months in which they had eaten or would eat fresh seafood.

Respondents were divided into user categories on the basis of how they responded to the statement, "Please indicate the number of meals at which you served fresh seafood in May by checking the appropriate space." Heavy users of fresh seafood were identified as having served 3 or more seafood meals at home during May. Light users

served seafood 1 to 2 times and, nonusers served no fresh seafood at home in May.

FINDINGS

Demographics of Users and Nonusers

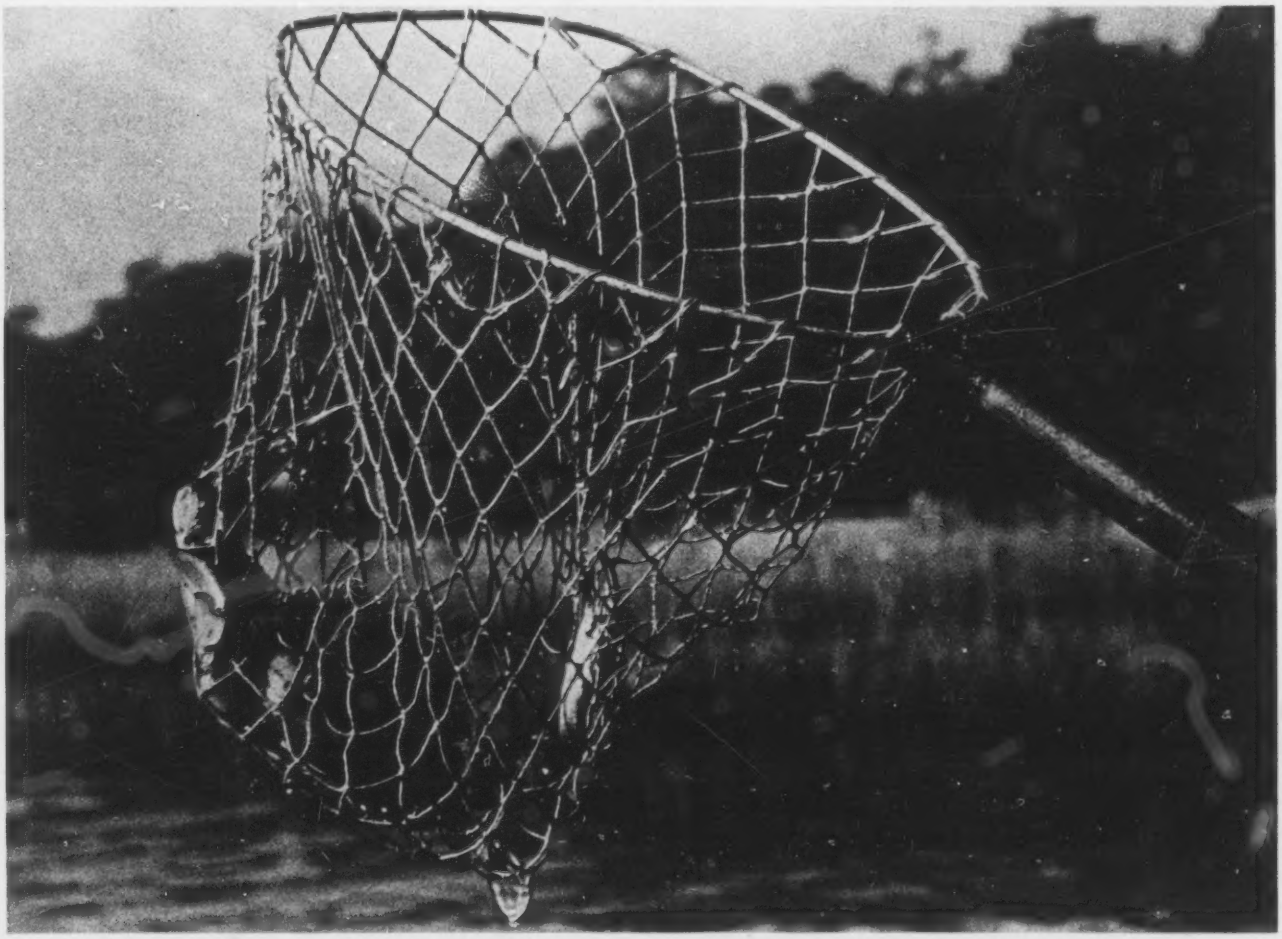
The proportion of households reporting heavy use decreased as distance from the coast increased. The percentage of households identified as heavy users was 47 in Charleston, 39 in Richland-Lexington, and 27 in Greenville-Spartanburg. The proportion of heavy users declined by 20 percent from Charleston to Greenville-Spartanburg.

The proportion of heavy users increased in households where the head-of-household had at least a college degree. Among households in which the head-of-household had more than a college degree (i.e., had done graduate, doctoral, or post-doctoral work) the percentage of heavy users was 57 as compared with 38 for the college-degree-only group, 30 for the some-college-or-trade-school group, and 33 for the completed-high-school-or-less group. A 24 percent increase occurred between consumers of the lowest and highest levels of educational attainment. (See Table 1.)

TABLE 1. Consumption of Fresh Seafood by Educational Level

Education	Non-users	Light Users	Heavy Users	Sample Base
Completed High School or Less	28%	39%	33%	105
Some College or Trade School	25	45	30	64
College Degree	27	35	38	93
More Than College Degree	13	30	57	37
Total	25%	38%	37%	299

There appears to have been no correlation between occupation and level of fresh seafood consumption. The proportion of heavy users among managerial and other white-collar families was 36 percent. This compared with 33 percent for the



A bite! (Photo courtesy of Coastal Carolina College.)

Off to a good start. (Photo by Bill Edmonds of Coastal Carolina College.)

sales group, 36 percent for the blue-collar group, 41 percent for the retired group, and 38 percent for others. The percentage of heavy consumers per group differed by only 8 between the retired group (41 percent) and the sales group (33 percent).

The percentages of heavy users increased as families approached the last segment of the full-nest stage of the family life cycle, and decreased as families entered the empty-nest stage. (The full-nest is characterized by teenagers living at home; in the empty nest, no children live at home.) The percentages of heavy users for the groups were 33 for Full Nest I (youngest child under age 6 years), 25 for Full Nest II (youngest child under age 12 years), 45 for Full Nest III (youngest child over age 12), 44 for Empty Nest I (chief wage earner still active in the work force), 35 for Empty Nest II (chief wage earner no longer working), and 34 for the Solitary Survivor.

Consumption Behavior

Among heavy and light users the types of fresh seafood most commonly cited as having been eaten

TABLE 2. Type of Seafood Consumed in May by User Category

Type of Seafood	Nonuser (25%)	Light User (38%)	Heavy User (37%)	Total
Shrimp	1%	48%	57%	39%
Flounder	0	42	49	34
Sea Bass	1	5	12	7
Grouper	0	3	5	3
Porgey	0	3	4	3
Mackerel	0	4	12	6
Red Snapper	0	5	16	8
Lobster	0	3	2	2
Crabs	0	11	23	13
Other*	4	30	40	27
Sample Base	62	116	107	285

*Bream — 21%, Croaker — 13%, Catfish — 11%, Crappie 11%, Trout — 11%, Oysters — 9%, Spots — 7%, Whiting — 5%, Other — 12%.

in May were shrimp, flounder, crabs, and red snapper. Fresh shrimp consumption was reported by 57 percent of heavy users and 48 percent of light users, as compared with 49 percent and 42 percent, respectively, for flounder; 23 percent and 11 percent for crabs; and 16 percent and 5 percent for red snapper. (See Table 2 for details.)

Availability

While 47 percent of nonusers, 64 percent of light users, and 71 percent of heavy users said fresh seafood was available in their supermarkets, all three groups listed fish markets as the usual source of the fresh seafood they served at home. A greater percentage of the heavy users versus nonusers identified the fish market as the most frequent origin. Other commonly cited sources (in descending order) were: supermarkets, dock purchases, catches by family members, and gifts from friends. Heavy users were less likely to list supermarkets (16 percent) than were light users (25 percent) and nonusers (23 percent). (See Table 3 for details.)

User Preferences

Respondents in all three groups chose the fish market over the supermarket as their favorite place to buy fresh seafood. Among heavy users, 74 percent chose the fish market as compared with 66 percent of the light users and 53 percent of the nonusers.

TABLE 3. Most Frequent Origin of Fresh Seafood Served at Home, by Consumption Category

Origin of Seafood	Nonusers	Light Users	Heavy Users	Total
Fish Market	27%	39%	46%	39%
Supermarket	23	25	16	21
Purchased at Dock	13	9	3	7
Caught by Family Member	21	20	22	21
Gift From Friend	11	4	8	8
Other	5	3	5	4
Sample Base	62	116	107	285

Most respondents believed that fish markets offered lower prices for fresh seafood than supermarkets. Among heavy users, 61 percent preferred fish market prices. Comparative percentages for the light and nonusers were 65 and 46, respectively.

Generally, respondents believed the taste of fresh seafood from fish markets was good. Specifically, 84 percent of the heavy users, 83 percent of the light users, and 64 percent of the nonusers approved of the taste.

Profile Summaries

In South Carolina in 1980, heavy consumers of fresh seafood were likelier to exhibit one or more of the following characteristics than were light or nonusers:

All in all, a good catch. (Photo by Bill Edmonds of Coastal Carolina College.)

—lived close to the coast

—had college degrees or higher

—were members of the black or higher social class white population

—were in the 50-59 year age bracket

—earned more than $20,000 annually

—were members of the Episcopalian or Catholic church

Consumer behavior characteristics of heavy users included the following:

—eating seafood often in restaurants (41 percent)

—purchasing fresh seafood from fish markets or catching their own

—eating fish at home most often during June and July (true of all three groups)

Demographic trends that characterized light consumers included being clustered in the two earliest stages of the family life cycle and in Empty Nest II, living in the Columbia or Greenville area, and having less than a college degree. Light users also tended to purchase fresh seafood at the fish market or supermarket and to eat seafood in restaurants almost as often as heavy users did.

Nonusers were evenly distributed throughout the family life cycle. They were likely to live in the Greenville area and to have a college degree or less. Consumption behavior for them included purchasing fish at fish markets or supermarkets, but not eating seafood in restaurants very often.

IMPLICATIONS

Increasing the frequency of fresh seafood consumption among current consumers of seafood should be the marketing goal of fresh seafood producers. The majority of the households sampled did eat fresh seafood but very infrequently.

A positioning statement needs to be developed for fresh seafood to gain an active share-of-mind in the consumer decision process of meal planning. Most consumers are likely to consider fresh seafood as an alternative to red meat or poultry dishes only rarely.

Research on soup consumption in 1981 by the Campbell Soup Company found a similar problem: soup was not actively considered in meal planning. Since Campbell's Soup enjoys an 80 percent market share in the condensed soup industry, the firm decided to position soup as "good food" with the statement "Have you heard the good news about soup?" The firm believes that Campbell's Soup sales will increase if soup sales increase.

Given (1) the high consumer acceptance of the taste and (2) the nutritional value (i.e., low fat, high protein content) of fresh seafood versus red meat, fresh seafood might be positioned effectively as "**the** really good meal." This simple benefit-oriented message should then be supported with an active publicity program to lend credibility to the message.

The Supreme Court and Employment and Labor Law

By Lovic A. Brooks III

Until 1964, employment and labor law played a minor and oftentimes insignificant role in the yearly work of the U.S. Supreme Court. However, beginning in 1964 and continuing through today, the number of employment and labor law issues presented to, and decided by, the Supreme Court has steadily increased. Approximately 20 percent of the Court's case load during the past two years has been in this area of the law, more than any other single area.

Much of the increase must be attributed to the passage of employment and labor laws in the 1960's and 1970's, especially Title VII of the Civil Rights Act of 1964 which prohibited employment discrimination. Some of the increase, however, must also be attributed to the public's growing awareness of employment and labor law and the fact that today these laws have assumed a place of increasing importance in the daily lives of so many people.

Although the 1981-'82 term of the Supreme Court did not produce the highly publicized and thought provoking cases seen in recent years, such as **Gunther v. County of Washington**[1] in 1981 on comparable worth and **University of Calif. Regents v. Bakke**[2] in 1978 on reverse discrimination and affirmative action, there were still some important cases that did produce a sharply divided court.

A highlight of this year's term and possible signal of a "shift to the right" by the Court was the complete reversal of Justice Brennan's emergence last year as the Court's leading spokesman and most influential member on employment and labor law issues. During the 1980-'81 term, Justice Brennan, one of the Court's two leading liberals, authored 7 of the 27 employment labor law cases decided by the Court. In the Court's latest term, however, Justice Brennan authored only 1 opinion, although an important one, and found himself in the minority in several key cases. Justice White, by contrast, continued to be a pivotal vote. Justice White has been said to be a disappointment to those who advocated his appointment by President Kennedy. He was in the majority in 26 of the 27 employment and labor law cases decided during the 1980-'81 term, although he did not author a single opinion. This year, however, White not only continued to be a part of the majority in almost all employment and labor law cases, but also authored all except 2 cases where the Court was divided by 1 vote.

The 1981-'82 term also saw Justice Blackmun and his fellow Nixon appointees, Chief Justice Burger and Justices Powell and Rehnquist, continue to be on opposite sides on many issues. Justice O'Connor, the newest justice and the Supreme Court's first female appointee, asserted herself strongly during her first full term and, on occasions, filled the void in the so-called Nixon bloc caused by Blackmun's defection to the other side. However, in two important cases, she too, joined the other side, leaving the Chief Justice and Justices Powell and Rehnquist as the dissenters.

Chief Justice Burger and Justice Marshall continued to represent the philosophical extremes on the Court and found themselves on opposite sides in all except one employment and labor law case that was not decided by a unanimous court. Finally, Justice Stevens proved to be the loner in employment labor law cases during the 1981-'82 term by writing separate concurring or dissenting opinions in three cases.

The foregoing does not mean to suggest that the law gives way to the philosophies and personalities of the individuals who make up the nation's highest tribunal. This is amply demonstrated by the fact that the Court was unanimous in deciding several cases[3] and, in one case, **United Steelworkers of America v. Sadloski,**[4] the unlikely combination of Justices Marshall, Powell, Rehnquist, Stevens, and O'Connor formed the majority in a 5-4 decision. However, when the legal issue is close, and the case has political, social, or philosophical overtones, then most would agree that philosophies and personalities do play an important, if not decisive, role in the Court's decision making. As will be seen, this was apparent in employment and labor law cases decided during the 1981-'82 term.

LABOR LAW CASES

In **NLRB v. Hendrix County Rural Electric Membership Corp.,**[5] decided December 2, 1981, the Court was presented with the issue of whether all employees having access to confidential information or only those having access to information concerning labor relations or personnel matters are exempt from the National Labor Relations Act's definition of employee and therefore ineligible for union representation. The National Labor Relations Board employs a "labor nexus" test in

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[1] ___ U.S. ___, 25 FEP Cases 1521.

[2] 438 U.S. 265, 17 FEP Cases 1000.

[3] **Logan v. Zimmerman Brush Co.,** ___ U.S. ___, 28 FEP Cases 9 (1982); **UMW Health & Retirement Fund v. Robinson,** ___ U.S. ___, 109 LRRM 2865 (1982); **Finnegan v. Leu,** ___ U.S. ___, 110 LRRM 2321 (1982); **Woelke & Romero Framing, Inc. v. NLRB,** ___ U.S. ___, 110 LRRM 2377 (1982); and **Summit Valley Industries, Inc. v. Local 112, Carpenters,** ___ U.S. ___, 110 LRRM 2441 (1982).

[4] No. 81-395 (June 14, 1982).

[5] ___ U.S. ___, 108 LRRM 3105.

determining whether an asserted confidential employee is excluded from the act's coverage. The test requires that the employee have access to confidential information relating to the employer's labor relations program or personnel matters before he can be excluded. The U.S. Court of Appeals for the Nineth Circuit held in the **Hendrix** case, however, that by virtue of language in the Supreme Court's earlier decision in **NLRB v. Bell Aerospace Co.**,[6] all confidential employees are excluded.

One can easily imagine the number of employees in today's business world who have access to confidential information of some kind, and therein is the extreme significance of this case. The ruling that all confidential employees are excluded from the act's coverage would render thousands of employees ineligible for union representation. On the other hand, their inclusion in a unionized group of employees would present obvious conflict of interest potentials. Furthermore, unions often have no desire to represent employees so closely allied with management.

In a majority opinion written by Justice Brennan and joined by Justices Marshall, White, Blackmun, and Stevens, the Court accepted the NLRB labor nexus test. The majority focused on the NLRB's long-standing practice which apparently had Congressional approval of excluding only those employees with access to confidential information relating to labor relations as the basis for its decision. Justice Powell, with whom the Chief Justice and Justices Rehnquist and O'Connor joined in dissenting, criticized the majority for abandoning the Court's statement in the **Bell Aerospace** case which indicated that all confidential employees were excluded from the definition of "employee" and disagreed with the majority's conclusion that Congress was fully aware of the board's labor nexus test. The minority's real disagreement, however, is revealed by the language of the dissenting opinion.

> After today's decision, labor must accept into its ranks confidential secretaries who are properly allied to management. And these confidential employees, who are privy to the daily affairs of management, and who have access to confidential information, and who are essential to management's operation may be subjected to conflicts of loyalty when the essence of their working relationship requires undivided loyalty. The basic philosophy of labor relati ns laws, the expressed intent of Congress, and the joint desire of labor and management for undivided loyalty all counsel against such a result.

If it were not clear from the **Hendrix** decision that the dissenters were disillusioned with the majority's acceptance of the board's so-called expertise in interpreting the National Labor Relations Act, it became apparent the following month with the January 12 decision in **Bonanno Linen Service v. NLRB.**[7] The law prevents a member of a multi-employer bargaining group from withdrawing from the group during negotiations except in unusual circumstances where there has been a fragmentation and destruction of the bargaining group. At issue in the **Bonanno** case was the board's position that an impasse in negotiations, even when accompanied by a strike, does not constitute unusual circumstances justifying an employer's withdrawal from the bargaining group. In the **Bonanno** case, the union had entered into interim agreements with all other members of the bargaining group and Bonanno was the sole object of the strike. The bargaining impasse had lasted two years. The board held that even in this situation, there was not an effective fragmentation and destruction of the integrity of the bargaining unit that would justify unusual circumstances and allow withdrawal.

In the majority opinion written by Justice White, with Justices Brennan, Marshall, and Blackmun joining, the Court held that the board's position was not inconsistent with the act and did not frustrate the Congressional policy underlying the act. Therefore, it should properly defer to the board's judgment. Justice Stevens concurred in the majority opinion with the understanding that employers could join a bargaining group with explicit conditions placed on continued participation and in such cases, employers would not be precluded from withdrawing when the conditions for participation no longer existed. Chief Justice Burger with Justice Rehnquist filed one dissent sharply criticizing the board's conclusions on the issue and the majority's willingness to defer to the board's judgment. Chief Justice Burger found the board's position to be based on conclusionary statements unsupported by logic or experience. Justice O'Connor with Justice Powell filed a separate dissenting opinion concluding that each case should be considered separately and that there

[6] 416 U.S. 267, 85 LRRM 2945 (1974). The Court in **Bell Aerospace,** in holding that managerial employees were excluded from the act's definition of employee, concluded: "The Court of Appeals in the instant case put the issue well: '. . . surely Congress could not have supposed that, while 'confidential secretaries' could not be organized, their bosses could be." Id. at 284, quoting 475 F.2d at 491-492.

[7] ___ U.S. ___, 109 LRRM 2257.

should not be a hard and fast rule. These two justices would find in this particular case that the selective strike against Bonanno which had lasted for two years was a sufficiently unusual circumstance, permitting an employer to withdraw from a bargaining group.

The final case arising under the National Labor Relations Act that split the Court during the 1981-'82 term was **Kaiser Steel Corp. v. Mullins,** issued on January 13, 1982.[8] For many years, the collective bargaining agreement between a group of coal producers, including Kaiser, and the United Mine Workers provided that the coal producers would contribute a certain amount to the employees' health and retirement fund when they purchased coal from producers who were not signatories to the agreement. Kaiser purchased coal from another company that was not a signatory to the contract, but failed to make the agreed upon contributions to the health and retirement fund. The trustees of the fund sued Kaiser for the contributions.

Kaiser defended the suit on the grounds that the agreement violated the anti-trust laws and was a hot cargo agreement prohibited by Section 8(e) of the National Labor Relations Act.[9] The issue before the Court was whether Kaiser was entitled to raise these defenses to its failure to contribute to the fund. The union and trustees to the fund argued that Kaiser had agreed to contribute the funds and that the contributions in and of themselves were not illegal and, therefore, the legality of the contract provision calling for the contributions was not relevant. They also argued that Kaiser idly sat by with no intentions of making the contributions while employees fulfilled their obligations under the contract and, therefore, Kaiser was estopped from asserting after the fact that the contract was unlawful.

It appeared that all nine justices agreed that at the time the lawsuit was filed, Kaiser had a right to raise the illegality of the contract provision calling for the contributions as a defense. However, before the Court could decide the case, Congress passed the Multiemployer Pension Plan Amendments Act of 1980, amending the Employees Retirement Income Security Act (ERISA). Congress was concerned that the stability of pension funds was endangered by employer delays in contributions caused by defenses to lawsuits by trustees that had nothing to do with the agreement to contribute itself. For example, an employer might allege that an unlawful strike under one provision of its contract relieved it of its obligations to contribute to a pension fund under another provision of its contract. Accordingly, the only defense Congress permitted to a failure to contribute was that there was no agreement to contribute or that the contribution itself was unlawful under ERISA. The Court held that Kaiser was entitled to defend on the ground that the contract provision was illegal. Justice Brennan, with whom Justices Marshall and Blackmun joined, filed a dissenting opinion saying that the new law prevented the raising of any defense other than that which held the contribution to be violation of ERISA. Under the dissenters' rationale, Kaiser could not maintain its anti-trust law or unlawful hot cargo agreement defenses. The majority, however, concluded that Congress had no intentions of immunizing contributions that were to be made pursuant to a provision that violated the anti-trust laws or the labor laws.

EMPLOYMENT DISCRIMINATION CASES

The 1981-'82 term produced two employment discrimination cases that split the Court by a vote of 5-4. In both cases, Justice White authored the majority opinion and was joined by the Chief Justice and Justices Powell, Rehnquist, and O'Connor. Similarly, in both cases, Justices Brennan, Blackmun, and Marshall filed one dissenting opinion and Justice Stevens filed another.

The first case was **American Tobacco Company v. Patterson,**[10] decided April 5, 1982. Section 703(h) of Title VII of the 1964 Civil Rights Act provides that

> it shall not be an unlawful employment practice for an employer to apply different standards of compensation, or different terms, conditions, or privileges of employment pursuant to a bona fide seniority or merit system . . . provided that such differences are not the results of an intention to discriminate because of race, color, religion, sex, or national origin.

Thus, under Section 703(h), the fact that a seniority system has a discriminatory impact is not alone sufficient to invalidate the system: there must be proof of actual intent to discriminate. The issue in

[8] ___ U.S. ___, 109 LRRM 2268.

[9] The provision had the purpose and effect of causing the coal producers to refrain from doing business with employers whose employees were not represented by the UMW. The object was to expand the UMW's organizational base. This constitutes a group boycott in violation of the Sherman Act, 15 U.S.C. SS 1 and 2 (anti-trust laws) and a secondary boycott or hot cargo agreement in violation of Section 8(e) of the NLRA, 29 U.S.C. 158(e).

[10] ___ U.S. ___, 28 FEP Cases 713.

BUSINESS AFFILIATES

The Business Affiliates program of The USC-Business Partnership Foundation, chartered in 1977, is designed to attract business investment and participation in the programs of the College of Business Administration. Advantageous to both, this program benefits the business community through better prepared graduates and higher levels of professionalism of employees who participate in the graduate or continuing education programs, and the college through a new sense of relevancy and realism from corporate and business involvement.

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Reeves Brothers, Inc.
Republic National Bank
Richtex Corporation
Riegel Textile Corporation
Security Federal Savings & Loan Assoc.
Seibels Bruce & Company
Self Foundation
Singer Foundation
J. E. Sirrine Company
Smith, Sapp & Company
Sonoco Products Company
S. C. Electric & Gas Company
S. C. Federal Savings & Loan Association
S. C. National Bank
Southern Bank & Trust Company
Southern Bell Telephone & Telegraph Co.
Spartan Foods
Springs Mills, Inc.
Standard Federal Savings & Loan Association
Standard Life
State-Record Company
Synalloy Corporation
Union Carbide Corporation
Uniroyal, Inc.
U. S. Shelter Corporation
W. R. Grace
Wachovia Bank & Trust Company
Wellman Industries, Inc.
Westinghouse Educational Foundation
Wilbur Smith & Associates

the **Patterson** case was whether Section 703(h) applies to all bona fide seniority systems or only those implemented before the passage of Title VII. The five-justice majority held that Section 703(h) protects all bona fide seniority systems regardless of the date of implementation. In a dissent joined by Justices Marshall and Blackmun, Justice Brennan found that the word "apply" in the above quoted provision limited the application of Section 703(h) to pre-1964 seniority systems, reasoning that otherwise Congress would have used the words "adopt and apply." Further, the dissenters were willing to defer to the EEOC's construction of Title VII in this manner, much for the same reason these justices deferred to the NLRB's interpretation of the National Labor Relations Act in the **Hendrix** and **Bonanno** cases discussed above. Justice Stevens agreed with the general principle stated by the majority that Section 703(h) protects post-1964 bona fide seniority systems, but dissented because he disagreed with the majority's opinion that a seniority system that has a discriminatory impact at the time of its adoption can be bona fide under Section 703(h).

In sum, the majority found that Section 703(h) protects all seniority systems regardless of the date of the passage as long as there is no proof of discriminatory intent. Justices Brennan, Marshall, and Blackmun found that Section 703(h) protects only those seniority systems implemented before passage of the act and, therefore, proof of discriminatory intent or impact will invalidate a seniority system passed after 1964. Finally, Justice Stevens would require a discrimination free seniority system at the time of its adoption but thereafter would give a seniority system the protection of Section 703(h) in future applications.

The second decision splitting the Court by a vote of 5-4 was **Kremer v. Chemical Construction Corp.,**[11] decided May 17, 1982. The decision in that case has far-reaching implications. When Congress passed Title VII, it provided that states could adopt their own employment discrimination laws, and that if they chose to do so, then individuals would be required to proceed under state law before resorting to the EEOC to assert their federal right. Congress' purpose was to give the states the first opportunity to correct discriminatory practices. Today, most states, including South Carolina, have adopted laws prohibiting employment discrimination.[12] Title VII, however, does not require that an individual rely on state law and procedure which may be ineffective or slow in redressing employment discrimination. An individual simply must initially file with the state and then is free to file with the EEOC and pursue a federal claim after 60 days, regardless of the status of the state claim.

The issue presented in the **Kremer** case was whether an individual who pursues his state claim to the point of a final adjudication on the merits, and loses, may then proceed under federal law. Most lower courts had held that an individual was entitled to file the federal claim after losing at the state level, relying on Supreme Court decisions emphasizing a liberal construction of Title VII and legislation history indicating a real concern for the fairness and adequacy of state handling of discrimination cases by states.

The Court majority, however, held that an individual was not entitled to two bites of the apple. Justice White, writing for the majority, concluded that federal law requires federal courts to give "preclusive effect" to any state court judgment which would have "preclusive effect" in the state's own court, and that nothing in Title VII exempted it from this federal law. Thus, since Kremer was forever barred from relitigating his claim in state court, he was likewise barred from federal court. One dissenting opinion, authored by Justice Blackmun and joined by Justices Brennan and Marshall, acknowledged the general rule, but argued that Congress clearly intended to exempt Title VII from this rule and allow federal courts to hear alleged discrimination cases regardless of any action or disposition at the state level. Justice Stevens filed his own dissenting opinion, asserting that the state proceedings in this case were not entitled to a preclusive effect due to their inadequacy in fully addressing Kremer's claim and for this reason the claim could be reasserted in federal court.

The future significance of this case is that informed claimants will avoid any final determination by the state so as not to close the door to federal court which in most cases offers broader remedies and a greater opportunity for success. As a result, the trend toward more state involvement in resolving what can be fairly described as a state problem may well be reversed.

THE FUTURE

Although the foregoing is a rather simple discussion of the complex legal issues raised by some of the more important employment and labor law cases decided by the Supreme Court during the

[11] ___ U.S. ___, 28 FEP Cases 1412.

[12] South Carolina Human Affairs Law, SS 1-13-10 **et seq.**, Code of Laws of South Carolina, 1976, as amended.

1981-'82 term, it should be evident that there is a clear division of the Court on the proper approach to deciding employment and labor law cases. One approach, and the one that has been prevalent since the days of the Warren Court, calls for expansive reading of the federal employment and labor laws and judicial deference to the federal agencies that administer these laws. The other approach calls for a more literal reading of the laws and less judicial and governmental interference, especially at the federal level. This second approach was expected to become the Court's approach with the appointment of the so-called Nixon bloc, but to date this has not been the case. However, the Court's decisions in **Kremer** and **Patterson,** for example, and the emergence of Justice White over Justice Brennan as the Court's leading spokesman in employment and labor law cases could be the first indicators of a changed direction by the Court. Clearly, if either Justice Brennan or Justice Marshall, the oldest member of the Court, should leave their posts and give President Reagan another appointment, one could fully expect a dramatic and decisive change.

The Employer and Employment Laws

By James J. Baldwin, LL.D.

The Employer and Employment Laws is a regular feature. Suggestions and inquiries by readers are invited.

RECENT LIMITATIONS ON CLASS ACTIONS SHOULD HELP EMPLOYERS IN TITLE VII CASES

On June 14, 1982, the Supreme Court issued its opinion in **General Telephone Co. v. Falcon,**[1] limiting the ability of disgruntled employees to bring broad, "across-the-board" challenges to employer's employment practices under Title VII of the Civil Rights Act of 1964. The Court in **Falcon** reversed a decision by Fifth Circuit Court of Appeals that had allowed the plaintiff, who individually claimed only that he had been denied promotions because of his national origin, to maintain an across-the-board challenge to the employer's employment practices on behalf of Hispanic applicants and employees. The Court ruled that "one allegation of specific discriminatory treatment [was insufficient] to support an across-the-board attack . . .[2] The Court noted that if an across-the-board attack could be maintained using such a tenuous basis, then

> every Title VII case would be a potential companywide class action. We find nothing in the statute to indicate that Congress intended to authorize such a wholesale expansion of class-action litigation.[3]

This decision is significant because it ended a past practice of some federal courts that liberally permitted across-the-board class actions in employment discrimination cases, even though such cases usually were premised on narrow individual complaints by one or a few employees or applicants. Such liberal access to across-the-board class actions often had deterred employers from fighting employment discrimination cases because they feared that to do so would lead to a protracted and expensive class action case involving the entire spectrum of their employment practices.

The "across-the-board" approach to Title VII class actions had been developed by the Fifth Circuit Court of Appeals in **Johnson v. Georgia Highway Express, Inc.**[4] The plaintiff in that case had claimed only that he had been discriminatorily discharged because of his race, but had sought to sue the employer in an across-the-board

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[1] ___ U.S. ___, 28 FEP Cases 1745 (1982).

[2] 28 FEP Cases at 1750.

[3] *Id.*

[4] 417 F. 2d 1122 (5th Cir. 1969).

challenge to all of the employer's employment practices on behalf of all present black employees and all previously discharged black employees. In the district court, the defendant had moved to limit the class to just other black employees, like plaintiff, who had been discharged, and the district court had granted the motion. On appeal, the Fifth Circuit had reversed the district court's decision, indicating that the plaintiff's case should have been treated as an across-the-board attack on a company-wide policy of discrimination. The Fifth Circuit had reached this result even though it acknowledged that individual factual questions would exist regarding different past or present employees. The court had ruled that the proper focus in such cases was on the impact of the discriminatory policy or policies at issue in the case. In this regard, the court apparently was willing to assume that racial discrimination affected all blacks within the alleged class the same way, despite factual differences that might exist from one individual to the next, and thus had held that sufficiently common questions of law and fact existed to permit class action treatment.

Following the **Georgia Highway Express** decision, numerous other courts also had adopted the across-the-board approach, allowing even employees with relatively unique individual grievances to represent broad classes of applicants and/or employees in across-the-board challenges to employers' employment practices. The Fourth Circuit Court of Appeals in Richmond, Virginia, for instance, had followed this approach in **Barnett v. W. T. Grant Co.**[5] In that case, the plaintiff had claimed that the company discriminatorily had denied him a promotion to an over-the-road driver position because of his race. In addition, he had sought to maintain an across-the-board attack against the company's employment practices on behalf of all blacks then employed by defendants at its Mecklenburg County, North Carolina, facilities and "all blacks who have been, continue to be, or might be adversely affected by the alleged racially discriminatory employment practices of the defendants." The district court had refused to allow Barnett to maintain this broad class action and also had found that his individual claim was unmeritorious. Despite agreeing with the district court that Barnett's individual claim had no merit, the Fourth Circuit had ruled that he should have been allowed to maintain an across-the-board challenge on behalf of the broad class identified by him. The language of the court's reasoning was typical of that often utilized by courts allowing across-the-board class actions in Title VII cases.

> . . . Barnett directed his attack at discriminatory policies of [the company] manifested in various actions, and as one who has allegedly been aggrieved by some of those actions he has demonstrated a sufficient nexus to enable him to represent others who have suffered from different actions motivated by the same policies . . . We see no way in which his interests could be antagonistic to those to anyone in the class, and thus no basis for fear that he might be an inadequate representative . . .[6]

The gist of this reasoning was that as long as the plaintiff alleged discrimination based on a characteristic such as race, sex, national origin, or religion that was to all members of the class, the court would permit him to maintain a broad class action, even though the discrimination had occurred in different ways with respect to the various class members.

The danger of this approach to employers had been obvious: virtually every Title VII complaint had carried with it class action implications involving great expense and significant potential liability. A more serious problem also had existed, though. The courts following the across-the-board approach often had glossed over the usual requirements for federal court class actions. These requirements, which are embodied in Federal Rule of Civil Procedure 23,[7] are intended to ensure that a class action is the most efficient method of handling the claims presented by a plaintiff and that the plaintiff is a proper representative of the class members' interests. The mere fact that all persons within an alleged class may have experienced discrimination, albeit in many different ways, in no way ensures that these requirements have been met. A plaintiff who claims that he has been discriminatorily discharged, for instance, does not necessarily raise claims typical of others who believe they have been discriminatorily discharged. Discharges occur for a myriad of reasons and involve innumerable different fact situations.

[5]518 F. 2d 543 (4th Cir. 1975).

[6]518 F. 2d at 548.

[7]Rule 23 requires the plaintiff in a class action to establish four essential elements before he can conduct his case as a class action. The purported class representative must show (1) that the number of class members is so large that the individual members of the class cannot practicably be made parties to the lawsuit, (2) that common questions of law and fact exist with regard to the class members' claim, (3) that the class representative's individual claims are typical or representative of those raised on behalf of the alleged class, and, most importantly, (4) that the class representative adequately can advocate the interests of the class.

Similarly, such a plaintiff probably has very little in common with individuals who believe they have been discriminatorily denied employment or promotions. Hiring and promotion decisions involve completely different considerations from those involved in discharge decisions. Such problems not only weaken a purported class representative's ability to present adequately the class members' claim, but also undermine the class action as an efficient means of resolving the class members' claims. The court can become so mired in individual distinctions between class members in such situations that the end result is a nightmare of confusion and disarray. This result, of course, also means that expenditures of time and money by the defendant greatly increase as well.

A cogent warning about such problems was sounded long ago by Judge John C. Godbold of the Fifth Circuit in his special concurrence to the **Georgia Highway Express** decision.

> Over technical limitations of classes by the district court will drain the life out of Title VII, as will unduly narrow scope of relief once discriminatory acts are found. But without reasonable specificity the court cannot define the class, cannot determine whether the representation is adequate, and the employer does not know how to defend. And, what may be most significant, an overbroad framing of the class may be so unfair to the absent members as to approach, if not amount to, deprivation of due process. Envision the hypothetical attorney with a single client, filing a class action to halt all racial discrimination in all the numerous plants and facilities of one of America's mammoth corporations. One act, or a few acts, at one or a few places, can be charged to be part of a practice or policy quickening an injunction against all racial discrimination by the employer at all places. It is tidy, convenient for the courts fearing a flood of Title VII cases, and dandy for the employees if their champion wins. But what of the catastrophic consequences if the plaintiff loses and carries the class down with him, or proves only such limited facts that no practice or policy can be found, leaving him afloat but sinking the class? . . .
>
> [C]ounsel, and at times the courts, are moving blithely ahead tacitly assuming all will be well for surely the plaintiff will win and manna will fall on all members of the class. It is not quite so easy.[8]

In the late 1970's, these concerns finally had led many courts to abandon the across-the-board approach to Title VII class actions. This change in philosophy had accelerated rapidly following the Supreme Court's 1977 decision in **East Texas Motor Freight System, Inc. v. Rodriquez.**[9] In that case, the Court had chastised the Fifth Circuit for its liberal approach in allowing broad class actions in Title VII cases, particularly with regard to situations like that present in **Rodriquez,** where the class representatives had been clearly unqualified to represent the alleged class. The Court had made the following significant observation in explaining its ruling.

> We are not unaware that suits alleging racial or ethnic discrimination are often by their very nature class suits, involving classwide wrongs. Common questions of law or fact are typically present. But careful attention to the requirements of [the federal rules] remains nonetheless indispensable.
>
> The mere fact that a complaint alleges racial or ethnic discrimination does not in itself ensure that the party who has brought the lawsuit will be an adequate representative of those who may have been the real victims of that discrimination.[10]

Most courts had recognized after **Rodriquez** that the across-the-board approach to Title VII class actions did not mesh with the Supreme Court's mandate that "careful attention" be given to the federal rules' requirements in such cases. Thus, these courts had begun to abandon the across-the-board approach and to allow class actions in Title VII cases only when the plaintiff could prove that each of the federal rules' requirements had been met. In **Hill v. Western Electric Co.,**[11] for instance, the Fourth Circuit had retreated from its endorsement of the across-the-board approach in **Barnett** because of the **Rodriquez** decision. The court had recognized that "[w]hat is left of **Barnett** [after **Rodriquez**] . . . is not broad enough to permit a named representative to represent a class of people who suffered different injury or those having similar claims but who are employed in other facilities."[12] Subsequently, the

[8] **Johnson v. Georgia Highway Express, Inc.**, 417 F. 2d 1122, 1126-27 (5th Cir. 1969). (Godbold J., specially concurring.)

[9] 431 U.S. 395 (1977).

[10] *Id.* at 405-06.

[11] 596 F. 2d 99 (4th Cir. 1979).

[12] *Id.* at 102.

Fourth Circuit had reiterated its adherence to **Rodriquez'** guidelines in **Abron v. Black & Decker, Inc.,**[13] in which the court had reversed a district court decision allowing the plaintiff to maintain an across-the-board attack on an employer under Title VII.[14]

Some courts, however, had continued to follow the across-the-board approach after the **Rodriquez** decision. The Fifth Circuit, in particular, had refused to read **Rodriquez** as requiring an abandonment of that approach. In both **Satterwhite v. City of Greenville**[15] and the **Falcon** case,[16] the Fifth Circuit had reiterated the across-the-board approach while sanctioning broad class actions by plaintiffs having relatively unique individual claims.

The Supreme Court's opinion in the **Falcon** case, hopefully, has finally sounded the death knell for the across-the-board approach, which the Fifth Circuit so obstinately has perpetuated. Of course, some situations still will arise in which broad, Title VII class actions will be appropriate. This most likely will be the case when an employment policy or practice, such as preemployment testing, maternity benefits, minimum height or weight requirements, etc., is the subject of dispute under Title VII. Policies or practices of this nature generally affect all applicants or employees in the same or a similar manner, and broad class actions challenging such policies on behalf of a protected group adversely affected thereby are not uncommon. But the **Falcon** case should substantially ease the spectre of broad class action suits in those Title VII cases that arise from particular instances of discrimination, such as a refusal to hire or promote one or a few individuals, or a decision to discipline or discharge an employee. Where plaintiffs attempt to bring broad class actions in such situations, employers now should be able to eliminate or at least substantially restrict the class allegations. Knowing that they will not automatically be confronted with the massive potential liability and expense of an across-the-board class action lawsuit in Title VII cases also should encourage employers to contest more of the individual claims of employment discrimination in which they have legitimate defenses.

[13]654 F. 2d 951 (4th Cir. 1981).

[14]Inexplicably, though, the Fourth District recently reendorsed the across-the-board approach in **Brown v. Eckerd Drugs, Inc.**, 663 F2d 1268 (4th Cir. 1981), despite a vigorous dissent by Judge Donald Russell. This case must be seen as an aberration in light of the prior decisions by the court in **Hill** and **Abron.**

[15]578 F. 2d 987 (5th Cir. 1978) (en banc).

[16]626 F. 2d 369 (5th Cir. 1980).

Bottom Lines

By James B. Edwards, Ph.D., C.P.A., C.M.A., C.I.A., C.D.P.

Bottom Lines is a regular feature that brings attention to practical business taxes and accounting. Suggestions and inquiries by readers are invited.

SOUTH CAROLINA INCOME TAX RETURNS

Letters from our readers tell us that many people are not aware of all the income tax returns that are required to be filed in South Carolina. In this issue we shall attempt to identify forms and, briefly, specify who is required to file them.

LINE ONE

We will start with a list of tax forms that may serve as a check list for future reference. The numbers and the titles assigned by the state are given.

Individual

1001 — Individual Income Tax Return

1001 Schedule A — Statement of Income and Expense

1001 Schedule B — Supplemental Schedule of Income and Credits

Schedule 1001-LS — Special 10-Year Averaging Method

Schedule 1001-LS-2 — Special 10-Year Averaging Method

Schedule 1001-P — Part-Year and Nonresidents

1001-A — Individual Income Tax Return

1001-D — Statement of Claimant to Refund Due — Decreased Taxpayer

1001-DC — Dependent Care Expenses

1001-E — Conservation and Renewable Energy Source Expenses

1001-F — Schedule of Farm Income and Expenses

1001-X — Amended Individual Income Tax Return

1003 — Declaration of Estimated Tax for Individuals

1512 — Application for Extension of Time to File

Corporate

1101 — Corporation Tax Return

1101-AR-E — Annual License Fee Report of Corporations Exempt From S.C. Income Tax

1001-B — Bank Tax Return

1101-T — Tentative Corporation Tax Return

1101-U — Corporation Tax Return for Public Utilities

1103 — Domestic Insurance Company License Tax Return

1104 — Savings and Loan Association Tax Return

Schedule I — Corporation Included in Consolidated or Combined Return

Partnership

1301 — Return of Income of Partnership

Dr. James B. Edwards, C.P.A., C.M.A., C.I.A., C.D.P., and Professor of Accounting in the College of Business Administration at The University of South Carolina, earned his B.B.A., M.B.A., and Ph.D. Degrees in Accounting at the University of Georgia. A specialist in A.I.C.P.A. tax courses, Dr. Edwards has organized and taught a number of professional development programs for the National Association of Accountants, including the first C.M.A. review course in the United States. The winner of 6 national writing awards, he is the author of numerous articles and papers for leading journals and professional organizations, and is a popular public speaker and a very active member/officer of the American Institute of Certified Public Accountants, the American Accounting Association, the National Association of Accountants, the Planning Executives Institute, and the American Management Association, among others.

Fiduciary

1401 — Fiduciary Income Tax Return

LINE TWO

Briefly, filing requirements are given for each form.

Individual Income Tax Return (1001) — (1) Every resident having a gross income of $800 or more during the income year taxable to this state, and every nonresident having gross income of any amount from sources within the state of South Carolina, except persons who have attained the age of 65 years, who during the taxable year received gross income from all sources of not more than $2,800 and had no dependents, or $4,000 and had a dependent spouse or other dependent as defined by Section 12-7-310 is required to file. (2) Members of the Armed Forces who are legal residents of South Carolina are subject to South Carolina income tax regardless of the location of their post of duty. Income earned in South Carolina from South Carolina sources (non-military) by nonresident Armed Forces personnel is taxable. A taxpayer should use this form if he or she is a resident of South Carolina for the entire year and does not qualify or elect to file Form 1001-A (below), a part-year resident, or a nonresident. Part-year residents and nonresidents must attach a Schedule 1001-P (below) when using this form.

Statement of Income and Expense (1001 Schedule A) — Anyone having a net profit or loss from a business or a profession is required to file this form.

Supplemental Schedule of Income and Credits (1001 Schedule B) — Anyone having income from pensions, annuities, rents, royalties, a gain on the sale or exchange of personal residence, and/or profit from the sale or exchange of real estate, stocks, bonds, etc. must file this form.

Special 10-Year Averaging Method (Schedule 1001-LS) — Individuals, estates, and trusts who receive lump-sum distributions from a qualified annuity plan or an exempt trust that is part of a qualified employees' pension, profit sharing, or stock bonus plan may elect this option provided certain restrictions are met.

Special 10-Year Averaging Method (Schedule 1001-LS-2) — To be used by above for subsequent years provided a lump sum distribution or a lump sum distribution as a multiple recipient was received within 5 years preceding the year of current distribution and the tax was computed using the special 10-year averaging method.

Part-Year and Nonresidents (Schedule 1001-P) — Every part-year resident and nonresident having taxable income of any amount from sources within the state of South Carolina must attach this schedule to their Form 1001.

Individual Income Tax Return (1001-A) — An individual may elect to file on this form if he or she has been a resident of South Carolina for the entire year, his or her adjusted gross income from personal service is less than $10,000, and his or her income from dividends and interest is less than $1,000. Total adjusted gross income from all sources must be less than $10,000.

Statement of Claimant to Refund Due — Deceased Taxpayer (1001-D) — This form can be filed by (1) a surviving spouse, claiming a refund based on a joint return; (2) an administrator or executor; or (3) a claimant, for the estate of the decedent, other than above.

Dependent Care Expenses (1001-DC) — An individual may claim this deduction if he or she maintains a household that includes as a member one or more of the following qualifying individuals: (1) a dependent of the taxpayer who is under the age of 15 years with respect to whom the taxpayer is entitled to an exemption; (2) a dependent of the taxpayer who is physically or mentally incapable of caring for himself; and/or (3) the spouse of the taxpayer, if he or she is physically or mentally incapable of caring for himself or herself.

Conservation and Renewable Energy Source Expenses (1001-E) — Any individuals, fiduciary, or corporation subject to South Carolina income tax may claim as a deduction all qualified energy conservation and qualified renewable energy source expenditures made between the dates of July 1, 1980, and June 30, 1983, to the extent authorized by law.

Schedule of Farm Income and Expenses (1001-F) — This schedule is to be attached to Form 1001 by individuals engaged in the business of farming.

Amended Individual Income Tax Return (1001-X) — To be used by individuals reporting a change in a previously filed individual return. The Statute of Limitations for filing an amended return is three years from the date the tax was due to be paid.

Declaration of Estimated Tax for Individuals (1003) — Every individual having a gross income of $800 not subject to the withholding of South Carolina Income Tax who is either a resident of the state, or a nonresident or part-time resident receiving income from sources within South Carolina, is required to file a declaration. There are some exceptions, e.g., farmers, commercial fishermen, an individual whose prior year tax was less than $25, etc.

Application for Extension of Time to File (1512) — Extension of time for filing returns may be granted in cases of sickness; disability; absence from the state or country; or whenever, in the opinion of the commission, good cause exists.

Corporation Tax Return (1101) — Every corporation chartered or organized under the laws of the state of South Carolina, doing or transacting business wholly or partly within South Carolina, shall make a return.

Annual License Fee Report of Corporations Exempt from S.C. Income Tax (1101-AR-E) — All corporations foreign or domestic that are not required to file income tax returns under Section 12-7-230 S.C. Code of Laws 1976, as amended, except religious corporations, volunteer fire departments, and rescue squads are required to file this return. Essentially, this return applies to corporations that are exempt from South Carolina Income Tax.

Bank Tax Return (1101-B) — This return is to be filed by any person engaged in a banking business, whether incorporated under the Laws of South Carolina or any other state or the United States or whether unincorporated, except cash depositories.

Tentative Corporation Tax Return (1101-T) — This is an application for extension of time to file a corporation tax return. The estimated income tax liability for the period indicated must be stated and at least 24 percent paid with this return or in some previous manner.

Corporation Tax Return for Public Utilities (1101-U) — This return is to be filed by corporations under the regulation of the Public Utilities Laws of South Carolina.

Domestic Insurance Company License Tax Return (1103) — Each domestic life insurance company, domestic fire insurance company, domestic accident and health insurance company, domestic casualty or surety company and all domestic insurance companies of any class licensed by the Insurance Commissioner and incorporated under the laws of South Carolina whether or not they have a net income, must file this return.

Savings and Loan Association Tax Return (1104) — Every Building and Loan Association, Savings and Loan Association, and Federal Savings and Loan Association organized under the laws of South Carolina or any other State, or the

United States, located or doing business within the state of South Carolina must file this return.

Corporation Included in Consolidated or Combined Return (Schedule I) — All corporations included in a consolidated or combined South Carolina Income Tax Return must be individually identified through the inclusion of this schedule with the Corporation Income Tax Return in which said corporation has been consolidated or combined.

Return of Income of Partnership (1301) — Partnership, as such, are not subject to taxation under the Income Tax Act, but every partnership whether domestic or foreign, doing business or owning property in South Carolina must make a return of income on this form. The partnership return is for informational purposes only. Each partner must include his or her allocation of net income on his or her individual income tax return.

Fiduciary Income Tax Return (1401) — (1) Every resident estate or trust having a gross income of $800 or more during the income year if undistributed and (a) estate or trusts making a distribution of earnings in any amount to a resident of South Carolina, or (b) estates and trusts making a distribution to a nonresident beneficiary of income from real property or tangible personal property having an actual situs in South Carolina must file this return. (2) Every nonresident estate or trust with undistributed income of $800 or more as a result of transacting, conducting, doing business, or receiving an income within the jurisdiction of South Carolina, and (a) nonresident estate or trust making a distribution of income in any amount to a resident beneficiary, or (b) nonresident estates or trusts making a distribution of income from real property or tangible personal property having an actual situs in South Carolina in any amount to a nonresident beneficiary must file this return.

BEYOND THE BOTTOM LINE

Readers should consult with their tax advisors about these returns and the additional requirements that must be considered before taking any action. They should not rely on this column as their final source of information.

* * *

Much more to come in the future . . . some practical matters will be explored in depth . . . others will merely be identified . . . please share your ideas, questions, answers, etc. — just send them to Dr. James B. Edwards, College of Business Administration, The University of South Carolina, Columbia, South Carolina 29208.

New Plants and Employment Gains in South Carolina During the 1970's

By Nancy T. Matthews and Richard B. McKenzie[1]

New manufacturing plants moving into South Carolina typically are greeted with considerable media fanfare. The announcement of construction plans are, on occasion, made at a press conference hosted by the Governor. On the other hand, the growth in manufacturing employment in the South, and especially in the South Atlantic region, is often viewed with disdain in many Northern communities. In 1980, the **Cleveland Plain Dealer** headlines read, "Southland Has Northern Firms Whistling Dixie" and "North Carolina Sells Itself as Cheap Labor State," reenforcing a commonly accepted explanation for the relatively slower growth rate of Northern states, particularly industrial states like Ohio, Pennsylvania, and Michigan.

A recent **Chicago Tribune** article on the Sunbelt/Frostbelt confrontation began with stirring prose.

> They [Northern people and business] follow the sun, thousands each day, moving to find new prosperity. Northern cities cringe at the loss; Southern cities brag about the gain. The Sunbelt shines like a beacon to Detroit autoworkers and Ohio steelworkers suddenly without jobs, to those tired of cold winters, to the owners and management of Northern

[1]The authors are indebted to Trey Senn and Russell Burns for assistance in collecting the data, and to Thomas Schaap and Bruce Yandle for comments on an earlier draft of this article.

businesses that feel locked in decaying, crime-ridden cities.[2]

Such news accounts, carried in both Northern and Southern newspapers, of the interregional flows of people and businesses imply that Southern prosperity is critically dependent upon the in-migration of businesses from the North.

How dependent is the South on the inflow of manufacturing plants from other regions? Other studies have attempted to answer that question using the location files on Dun and Bradstreet, Inc., a data source that has been subject to some criticism.[3] This present article extends understanding of capital flows into the South by reporting the preliminary findings of a detailed survey of new manufacturing plants opening in South Carolina during the 1970-'79 period. Given the impression generated by news accounts, the overall conclusion of these authors is somewhat startling: while many new plants moved into this South Atlantic state from other regions, a substantial share of the new plants reflect growth of firms indigenous to South Carolina. Moreover, the manufacturing employment gains (as a percentage of state employment growth during the 1970's or as a percentage of total 1980 employment) in South Carolina appear to be attributable in a limited way to the expansion of firms outside the state.

In interpreting data presented in this article, the reader must keep in mind three caveats. First, the regional sources of new plants and employment are defined as the location of the firm's national or international headquarters. The headquarters of many firms, like Milliken, Inc., a major textile employer in South Carolina, are in New York (a part of the Mid-Atlantic region), mainly for financial and marketing reasons. Therefore, the new plants Milliken built in South Carolina during the 1970's are classified as "Mid-Atlantic plants."[4]

Second, the employment figures for new plants are based on employment levels in 1980, not on the employment level of the year a firm located in the state. Without question, many of the plants that located in South Carolina early in the decade expanded their operations in subsequent years. No doubt, a number of plants that opened during the 1970's closed before 1980 and they are not included in the survey.

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[2]"North's Economic Refugees Find Hope, Jobs in the Sunbelt," **Chicago Tribune,** 20 September 1981, pp. 5-7.

[3]See David I. Verway, "A Critical Examination of the Dun and Bradstreet Data Files," a paper presented at the Southern Regional Science Association annual meeting in Nashville, Tennessee, 6 April 1979. Many of the deficiencies of the Dun and Bradstreet files have been recognized by researchers who have used the files extensively. See David L. Birch, **The Job Generation Process** (Cambridge, Mass.: MIT Program on Neighborhood and Regional Change, 1979), section 2.

[4]Basic data on new manufacturing plants were obtained from lists of new and expanded firms compiled annually by the respective states' Department of Commerce and Economic Development. The headquarters of the firms were determined by their listing in **Standard and Poor's Directory.** The employment levels of the new plants were determined by reference to the state's directories of manufacturing. Because of the completeness and reliability of these data sources, the statistics employed in this preliminary study must be considered highly accurate.

TABLE 1. Sources of Industrial Employment in South Carolina by Category 1970-'80

South Carolina and Census Bureau Divisions	Number of Firms by Employment Categories			Employment by Firms in Employment Categories			Total Number of Firms	Total Employment 1980	Percentage Total New Employment	Average Employment Per New Firm
	0-99	100-499	500-	0-99	100-499	500-	All Sizes	All Sizes	All Sizes	
South Carolina	106	21	—	3,216	2,926	—	127	6,142	13%	48
New England	3	11	2	100	2,825	1,800	16	4,725	10	295
Mid-Atlantic	24	33	4	1,028	6,163	3,653	61	10,844	23	178
East North Central	32	24	4	1,461	5,077	2,893	60	9,431	20	157
West North Central	1	1	2	14	233	1,188	4	1,435	3	359
South Atlantic	120	24	3	3,872	3,374	2,254	147	9,500	20	65
(less South Carolina)	14	3	3	656	448	2,254	20	3,358	7	17
East South Central	1	2	—	15	273	—	3	288	1	96
West South Central	4	3	1	188	579	840	8	1,607	3	201
Mountain	1	1	—	4	285	—	2	289	1	145
Pacific	6	4	2	142	839	1,300	12	2,281	5	190
Foreign	14	7	4	410	1,298	5,200	25	6,908	14	276
Total	206	110	22	7,234	20,946	19,128	338	47,308	100%	140

Third, a "new plant" is any separate, identifiable manufacturing operation of a firm that was not in South Carolina prior to 1970. A company new to the state in, for example, 1971, may have established several separate plants over the 1970-'79 period. All of that firm's plants are counted as "new" to the state. Hence, the classification scheme used in this article tends to indicate the **maximum** plant and employment gains due to capital moving into South Carolina from other states.[5]

NEW PLANT AND EMPLOYMENT GAINS

As reported by the South Carolina State Development Board, firms announced the opening of 540 new manufacturing plants between the beginning of 1970 and the end of 1979. However, only 338 (or 63 percent) of those plants could be identified in the 1980 **South Carolina Industrial Directory.** Table 1 summarizes the findings on these surviving firms: It contains data on the number of plants, grouped by 1980 employment level and region of parent company's headquarters, that were "born" in South Carolina between 1970 and 1979. Of the 338 new industrial plants established during the 1970's, 127, or nearly 38 percent, were South Carolina-based plants (in the sense that the parent corporation was headquartered in South Carolina). An additional 20 plants moved into the state from other states in the South Atlantic region, and 11 plants moved to the state from other parts of the South, East, and West South Central divisions. Only 14 plants came from the West. The data reveal that 42 percent of the new plants that opened in the state and 56 percent of the employment gains **from new plants** came from Frostbelt regions: New England, Mid-Atlantic, East North Central, and West North Central.

Clearly, plants moving into South Carolina from the Frostbelt tended to be larger in terms of 1980 employment than did new South Carolina plants. For example, in 1980, 61 percent of the plants from the Mid-Atlantic region (accounting for 90 percent of the state's employment gains from the Frostbelt region) employed 100 or more workers (for an average of 178 workers per plant). Only 17 percent of the South Carolina-based firms (accounting for 50 percent of the employment gains from new South Carolina-based firms) employed 100 or more workers (for an overall average of 48 workers per plant). Still, the total industrial employment in 1980 of the 127 new South Carolina-based plants was over 60 percent the employment of those plants that moved into the state from the entire Mid-Atlantic region during the 1970's. Nearly all (95 percent) of the announced plants that could not be located in the 1980 **Industrial Directory** were "small" (fewer than 100 employees) and South Carolina-based.

Table 2 shows that new plants from the Mid-Atlantic and East North Central regions accounted for 22.9 and 19.9 percent, respectively, of the industrial employment growth (47,308 jobs) spawned in the state by all 338 new plants. Foreign-based firms established 25 plants, employing 6,908 workers. However, 68 percent of those employees in 1980 were working at several plants of one foreign firm, Michelin Tire.

NEW PLANTS AND TOTAL STATE EMPLOYMENT

Between 1970 and 1980, manufacturing plants were an important source of employment growth.

[5]The year 1980 was the beginning of a recession. Therefore, the relative growth of manufacturing employment in the two states may be biased downward.

TABLE 2. Proportion of Industrial Employment Gains in South Carolina by Source 1970-'80

South Carolina and Census Bureau Divisions	Percentage of Total Number of Firms	Percentage of Industrial Employment Gains 1980	Percentage of Total Employment Gains 1970-'80	Percentage of 1980 Total Employment
South Carolina	37.6%	13.0%	1.7%	0.50%
New England	4.7	10.0	1.4	0.40
Mid Atlantic	18.0	22.9	3.1	0.90
East North Central	17.8	19.9	2.7	0.80
West North Central	1.2	3.0	0.4	0.10
South Atlantic	43.5	20.1	2.7	0.80
(less South Carolina)	5.9	7.1	1.0	0.30
East South Central	0.9	0.6	0.1	0.02
West South Central	2.4	3.4	0.5	0.10
Mountains	0.6	0.6	0.1	0.02
Pacific	3.5	4.8	0.7	0.20
Foreign	7.4	14.6	2.0	0.60
Total	100.0%	100.0%	13.7%	3.94%

However, in the 1970-'80 period, total employment in South Carolina expanded by 348,000, or by 41.5 percent of its 1970 level. **All new industrial plants accounted for only 13.7 percent of total employment growth in South Carolina between 1970 and 1980.** Manufacturing plants from the Mid-Atlantic and East North Central regions accounted for only 3.1 and 2.7 percent, respectively, of total employment gains. Employment in foreign-owned plants represented only 2.0 percent of the overall growth in jobs. New South Carolina manufacturing plants were directly responsible for only 1.7 percent of total employment growth, perhaps explaining the impression that new jobs from new plants are created by firms outside the state.

In short, a substantially large proportion, 86 percent, of total employment gains in the state during the 1970's was due to the gradual, largely unheralded expansion of existing manufacturing firms and to the growth in the nonindustrial sectors of the South Carolina economy. The growth in the indigenous South Carolina economy was driving, as much or more as it was being driven by, the growth in new firms.

Many people in South Carolina and elsewhere seem to believe that all the new plants that can be observed along major highways represent a substantial proportion of the now existing employment opportunities in the state. However, the total number of jobs created directly from the construction of all new manufacturing plants during the 1970's represented slightly less than 4 percent of the state's total 1980 employment. (See Table 2.) The new jobs created directly from firms moving into the state from the entire Frostbelt region (New England, Mid-Atlantic, East North Central, and West North Central divisions) represented only 2.2 percent of the state's 1980 total employment (or 3.2 percent of the state's 1970 total employment). Of course, many of these Northern firms stimulated the expansion and emergence of jobs in support industries, and many improved the pay opportunities of South Carolina workers.

NEW PLANTS BY TYPE OF INDUSTRY

In 1970, the state's manufacturing sector employed nearly 50 percent of the total number of employees in South Carolina: over the decade, its share of the total employment declined to only 33 percent. However, manufacturing continues to dominate the state's economy. Textiles and textile related products traditionally have dominated the manufacturing sector, accounting for 55 percent of all manufacturing employment and 27 percent of the state's total employment in 1970. Table 3, which presents the new plant and employment data of the earlier table by two-digit Standard Industrial Classification (SIC) codes, reveals that new textile and apparel plants continued to play a significant part in the state's industrial growth during the 1970's, representing 22.5 percent of all new plants and 20.9 percent of employment gains from new plants. More than half of these textile and apparel plants (54 percent) were South Carolina-based. Despite the textile products' substantial share of the new plants and new employ-

ment, however, over the decade, textile and apparel industries actually experienced a decline in their shares of manufacturing employment to 47 percent and of total employment to 15 percent. This decline is due to the growth of other industrial sectors.

Overall, the industrial growth in South Carolina has been broad based. Of the state's 21 industrial sectors, 18 grew by the location of new plants during the 1970's: Food (SIC 20); Textiles (SIC 22); Apparel (SIC 23); Lumber (SIC 24); Furniture (SIC 25); Paper (SIC 26); Printing (SIC 27); Chemicals (SIC 28); Rubber (SIC 30); Stone, Clay, and Glass (SIC 32); Primary Metals (SIC 33); Fabricated Metal (SIC 34); Non-Electrical Machinery (SIC 35); Electronics (SIC 36); Transportation Equipment (SIC 37); Instruments (SIC 38); Miscellaneous Manufacturing (SIC 39); and Research and Development (SIC 73).

Rubber and miscellaneous plastics (SIC 30) experienced the greatest growth during the period, with the largest percentage (16) of total new employment resulting from the location of 32 new plants. The new employment gains comprised nearly 50 percent of the total 1980 employment for that industry. Most of the new employment in the rubber industry (61 percent) resulted from the location of 3 Michelin Tire plants from France, and 25 percent of the employment was contributed by 10 Northern firms, while only 9 percent was from the 10 South Carolina-based firms.

Electric and electronic equipment (SIC 36) also experienced considerable growth during the 1970's — 26 new electronics plants contributed nearly 15 percent of total new employment in 1980. The vast majority of this new employment (29 percent) resulted from the location of Northern-based firms, principally New York and Illinois.

Chemicals and allied products (SIC 28) accounted for 29 new plants and 8 percent of total employment gains, with 59 percent of the employment for the industry coming from Frostbelt firms. South Atlantic based firms contributed 38 percent of new employment, but 1 Delaware company, Dupont, accounted for more than 25 percent of the industry's employment gains. The growth in the chemical industry between 1970 and 1980 translated into 11 percent of the industry's total 1980 employment.

Primary metals (SIC 33), fabricated metal (SIC 34), and nonelectrical machinery (SIC 35) accounted for nearly 25 percent of the state's industrial employment gains during the decade: 57 percent of new employment resulted from the location of Northern-based companies. For the 3 industries, 39 Carolina firms were responsible for 11.5 percent of the employment gains. Overall, Southern-based firms were directly responsible for nearly 25 percent of the new employment in these industries. Each industry contributed substantially to total 1980 employment for the respective SIC codes.

Of the remaining industries, each experienced a smaller share of the new industrial employment gains. The majority of the employment gains in foods (SIC 20) came from Northern and foreign

TABLE 3. Employment Gains in South Carolina by Major Manufacturing Industries 1970-'80

Industry	Number of Firms	Employment	Average Employment per New Firm	Percentage Total New Employment	Percentage of 1980 Employment by Industry
Food and Kindred Products	7	1,198	171	2.5	8.24
Textile Mill Products	39	5,568	143	11.77	4.05
Apparel	37	4,296	116	9.08	9.23
Lumber and Wood Products	8	814	102	1.72	5.54
Furniture and Fixtures	8	701	88	1.48	14.64
Paper and Allied Products	11	800	73	1.69	5.63
Printing and Publishing	1	100	100	0.21	1.34
Chemicals and Allied Products	29	3,604	124	7.62	10.89
Rubber and Misc. Plastics Products	32	7,684	240	16.24	43.26
Stone, Clay, Glass, and Concrete	15	971	65	2.05	8.85
Primary Metals	18	2,852	158	6.03	37.64
Fabricated Metal Products	39	3,360	86	7.10	23.35
Machinery, Except Electric	50	5,231	105	11.06	16.53
Electric and Electronic Equipment	26	7,061	272	14.93	32.14
Transportation Equipment	5	944	189	1.99	24.90
Instruments and Related	5	818	164	1.73	13.78
Misc. Manufacturing	6	958	160	2.03	19.95
Research and Development	2	348	174	0.74	1.44
Total	338	47,308	140	100.0 %	12.0 %

TABLE 4. Industrial Employment Gains in South Carolina by County 1970-'80

County	Number Established	Employment	Total Percentage New Employment	Average Employment Per New Firm
Abbeville	1	36	0.08%	36
Aiken	10	1,931	4.08	193
Allendale	5	146	0.31	29
Anderson	18	2,431	5.14	135
Bamberg	2	70	0.15	35
Barnwell	3	545	1.15	182
Beaufort	5	898	1.90	180
Berkeley	12	3,675	7.77	306
Calhoun	2	263	0.56	132
Charleston	7	1,129	2.39	161
Cherokee	6	848	1.80	141
Chester	8	901	1.90	113
Chesterfield	6	1,246	2.67	211
Clarendon	1	300	0.63	300
Colleton	4	492	1.04	123
Darlington	5	274	0.58	55
Dillon	4	458	0.97	115
Dorchester	4	805	1.70	201
Edgefield	0	0	0.00	0
Fairfield	3	199	0.42	63
Florence	7	1,998	4.22	285
Georgetown	6	387	0.82	65
Greenville	39	4,774	10.09	122
Greenwood	8	1,399	2.96	175
Hampton	4	306	0.65	77
Horry	3	1,212	2.56	404
Jasper	5	106	0.22	21
Kershaw	5	498	1.05	100
Lancaster	5	1,535	3.24	307
Laurens	5	126	0.27	25
Lee	3	204	0.43	68
Lexington	14	2,092	4.42	149
Marion	6	1,525	3.22	254
Marlboro	5	852	1.80	170
McCormick	3	163	0.34	54
Newberry	2	249	0.53	125
Oconee	13	673	1.42	52
Orangeburg	9	1,248	2.64	139
Pickens	1	14	0.03	14
Richland	22	2,664	5.63	121
Saluda	1	12	0.03	12
Spartanburg	29	3,508	7.42	121
Sumter	6	1,256	2.65	209
Union	7	927	1.96	132
Williamsburg	5	1,072	2.26	214
York	19	1,843	3.90	97
Total	338	47,308	100.00%	140

firms. The majority of the new employment in furniture (SIC 25), paper (SIC 26), stone, clay, and glass (SIC 32), transportation equipment (SIC 37), instruments (SIC 38), and miscellaneous manufacturing (SIC 39), and all of printing (SIC 27) new employment came from the location of Northern-based firms in South Carolina during the 1970's. Only in the lumber industry (SIC 24) could more than 50 percent of the new employment be attributed to Southern companies.

It is evident from the breakdown of two-digit SIC industries by region that the Frostbelt states were responsible for the majority of recent employment gains. However, in 11 of the 18 industries experiencing employment gains during the decade, South Atlantic firms accounted for the largest percentage of new plants. In all but 4 industries, South Carolina-based firms were represented, **and** in 10 of the 14 represented industries, there were more South Carolina-based firms than firms from any other single state. The small employment size of the new plants of the South Carolina companies explains this discrepancy between the large percentage of South Carolina-based firms and the relatively low percentage of new employment from such firms.

Finally, new research and development plants (SIC 73) accounted for a meager proportion of the total number of new plants (2 out of 338 — both of which came from the Mid-Atlantic region) and a trivial percentage of the employment gains for new plants. Most of the job gains have been, as expected, in routine assembly line operations.

GEOGRAPHICAL DISTRIBUTION OF NEW PLANTS AND EMPLOYMENT BY COUNTY

Of South Carolina's 46 counties, all except Edgefield shared in the industrial gains directly resulting from the location of new manufacturing plants in South Carolina during the decade of the 1970's. The counties of Anderson, Greenville, and Spartanburg (located along Interstate Highway 85), Richland (the home of the state capital), and Berkeley each experienced the greatest employment gains. Together, these 5 counties accounted for nearly 50 percent of the total industrial employment gains from 1970 to 1980 and for more than 33 percent of the number of new plants locating in the state during that period. The remaining new plants and new employment appear to have been spread somewhat evenly over the remainder of the state. (See Table 4.)

While some counties gained only a very small percentage of the industrial growth in comparison to other counties, there seems to have been a pattern of distribution. With the exception of the Southern counties of Allendale, Hampton, and Jasper, those counties with meager proportion are contiguous to, or at least are in close proximity to, other counties with larger shares of the industrial gains. In this manner, the increased industrial activity in the nodal counties (those with greater growth) provides greater employment opportunities for the residents of those contiguous counties less fortunate in attracting new industries. The distri-

bution of new employment in the state's 46 counties shows another pattern. The greatest percentages of new employment generally are concentrated in counties containing the state's larger urban areas and in adjacent counties.

The largest employment gains in Anderson, Greenville, and Spartanburg are due in large measure to the location of the Michelin Tire Corporation, a French firm engaged in the production of rubber products. In all 3 instances, the plant employed nearly 50 percent of the county's new industrial employees. More than 50 percent of Berkeley County's large employment growth was attributable to the location of several large chemical plants in the county between 1970 and 1980. In Richland County, nearly 75 percent of the industrial employment gains resulted from the location of 7 new fabricated metal and nonelectrical machinery plants.

Greenville contained the largest number of new plants in most of the industrial categories. It is reasonable to assume that Greenville was the most attractive area for new plants during the 1970's: it was the site for more than 50 percent of all new paper plants (SIC 26). With Berkeley County, Greenville was responsible for 33 percent of the new chemical plants (SIC 28), and nearly that large a percentage of the new rubber products plants (SIC 30) located in Spartanburg and Greenville. However, there appears to have been no real concentration of individual industries in any one county or region of the state.

CONCLUDING COMMENTS

Much has been written about the "booming South" and about how Southern prosperity is dependent on the southward movement of industry. The absolute number of industrial plants that moved into South Carolina from outside the South Atlantic region during the 1970's (194, for an average of nearly 20 a year) is impressive. Since many of these plants were quite large (111 employed 100 or more workers in 1980, with 19 employing more than 500 workers), the attention given location decisions in the press is understandable. In addition, a large number of these plants provided many needed, higher paying jobs for the relatively low-income earners in South Carolina.

However, the preliminary survey reported on here suggested that the state probably would have prospered, relative to Northern sectors of the country, without the in-migration of industry from other regions. Undoubtedly, the jobs from new Northern industry contributed to South Carolina growth, but they also placed demands on the human and capital resources of the state and perhaps inhibited the emergence and expansion of South Carolina based industries. Furthermore, the industrial growth in the South freed resources for use in expanding sectors of the Northern economy and made more manufactured goods available to Northern states. Finally, much of the expansion resulting from the establishment of new plants in the state by firms based in other regions only occurred because of the growth of the Southern market. In many, if not virtually all, of these location decisions, all regions of the country — North and South — benefited from the development of the South Carolina economy.

Economic prosperity generally occurs where there are profitable opportunities, and where wages and other costs of production and taxes are kept competitive. To continue its growth, South Carolina must maintain its competitive advantages, which means, as a rule, maintaining the competitive edge of existing and new Carolina based firms.

South Carolina Banks and How They Are Doing

By James W. Wansley and William R. Lane

The past decade was a difficult period for the banking industry nationwide. The recession of 1974-'75, lack of significant economic growth following the recession, changing regulatory conditions, and severe interest rate fluctuations increased pressure on bank profitability. Restrictions on the rates banks could pay on deposits caused many depositors to withdraw their funds and invest them elsewhere at higher yields. The loss of core deposits in turn forced banks to find alternative, more expensive sources of financing. For several banks, the pressures were too great. The

frequency of bank failures increased greatly during the period, from 49 in the decade 1961-'70 to 79 in the decade 1971-'80.[1] With the economy remaining sluggish and the regulatory environment in a state of change, the present and future viability of the commercial banking industry in its current form has come into question.

Despite the industry's difficulties, however, banks in some parts of the country did fare better than those elsewhere. In this article the authors present an analysis of the profitability of South Carolina banks 1972-'81. The median bank performance in South Carolina is compared with those in North Carolina, Georgia,[2] and all insured banks in the United States. These comparisons provide insight into (1) the relative success of South Carolina banks in coping with the changing economic and regulatory climate, and (2) the components of performance of South Carolina banks relative to other banks in the same geographic region. Moreover, analysis of the past should provide some indication of likely relative performance in the future.

RETURN ON ASSETS AND RETURN ON EQUITY

Return on assets (ROA) and return on equity (ROE) are two generally accepted measures of bank profitability. Both measure performance in terms of the ability of a bank to generate profits relative to some investment base (assets and equity, respectively), and therefore, are overall indicators of management performance. Table 1 shows median returns on assets and equity for selected years for banks in South Carolina, North Carolina, Georgia, and the United States. Except for 1975 and 1981, both ROA and ROE have been increasing for banks in each of the three states as well as for the banking industry as a whole.

Overall bank performance in South Carolina compared favorably with that in each of the other groups. With the exception of ROA for Georgia banks since 1980, return on assets for South Carolina banks was consistently greater than that observed in any of the other groups. The picture for ROE, though, was slightly different. Although return on equity for banks in South Carolina was always greater than the corresponding figures for banks in North Carolina and the United States, it was generally less than that for Georgia banks.

For these trends in profitability to be understood, the overall measures must be broken down into

TABLE 1. Median Return on Assets and Equity for South Carolina, North Carolina, and Georgia Banks: Selected Years

Year	Return on Assets				Return on Equity				Number of Banks			
	South Carolina	North Carolina	Georgia	United States*	South Carolina	North Carolina	Georgia	United States	South Carolina	North Carolina	Georgia	United States
1972	1.12	0.91	1.00	0.84	12.64	11.75	12.53	11.51	94	86	431	13,721
1975	1.08	0.87	0.94	0.89	11.30	10.71	11.54	11.89	90	93	440	14,367
1978	1.13	0.97	1.10	0.99	12.03	11.96	12.31	12.65	87	88	439	14,386
1979	1.31	1.02	1.27	1.10	14.08	12.46	14.10	13.65	85	82	439	14,358
1980	1.38	1.04	1.41	1.12	14.10	12.04	15.16	13.48	85	79	435	14,429
1981	1.35	1.00	1.40	1.09	13.67	11.01	14.95	13.02	83	71	426	14,411

Source: Federal Reserve System Report on Income and Condition Subscription Service (magnetic tapes).
*All insured banks in the United States that were contained on the F.D.I.C. tapes for a given year.

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Dr. William R. Lane is Assistant Professor of Finance at Louisiana State University. He received his B.A. and M.B.A. Degrees from Lehigh University, and his Ph.D. from The University of North Carolina. Dr. Lane has published several articles on commercial bank management.

[1]In the first 5 months of 1982, there were 17 bank failures, nearly double the annual rate 1979-'81. Of the 10 largest insured bank failures in the United States, 9 have occurred since 1971. Among these failures was the American Bank and Trust Company of Orangeburg, South Carolina, in 1974. This failure required over $61 million in disbursements from the Federal Deposit Insurance Corporation.

[2]Some small differences in performance measures may exist due to different state bank structure laws. In North Carolina and South Carolina, state-wide branching exists. In Georgia, banks historically have been limited to county-wide branching. Recently (1979), this was changed to allow modified state-wide branching.

TABLE 2. Performance Measures for South Carolina, North Carolina, and Georgia Banks: Selected Years

Year	After Tax Profit Margin			Asset Utilization			Leverage		
	South Carolina	North Carolina	Georgia	South Carolina	North Carolina	Georgia	South Carolina	North Carolina	Georgia
1972	19.18	15.42	15.93	0.0603	0.0575	0.0630	11.20	12.53	12.82
1975	15.42	12.23	12.76	0.0694	0.0682	0.0743	11.00	11.82	11.87
1978	15.36	12.20	13.38	0.0778	0.0779	0.0824	10.24	11.66	11.47
1979	15.05	11.68	13.98	0.0864	0.0871	0.0921	10.18	11.38	11.26
1980	13.70	10.19	13.30	0.1000	0.0997	0.1059	9.80	10.95	10.84
1981	11.45	11.57	12.36	0.1121	0.0843	0.1120	9.98	10.80	10.95

Source: Same as Table 1, this article.

their fundamental parts. The authors examine those parts in the following section and explain why banks in South Carolina had superior levels of ROA, yet were dominated by the ROE for Georgia banks.

SOURCES OF BANK PROFITABILITY

As shown below, ROA is the product of after tax profit margin and asset utilization. The former is a measure of the ability to generate profits from revenues while the latter is a measure of the ability of management to generate revenues from the investment in assets.

$$\text{After Tax Profit Margin} \times \text{Asset Utilization} = \text{Return on Assets}$$

$$\frac{\text{Net Income}}{\text{Operating Revenue}} \times \frac{\text{Operating Revenue}}{\text{Total Assets}} = \frac{\text{Net Income}}{\text{Total Assets}}$$

Similarly, ROE is the product of return on assets and leverage. The latter measures the extent to which the firm is financed with debt and deposits rather than equity funds.

$$\text{Return on Assets} \times \text{Leverage} = \text{Return on Equity}$$

$$\frac{\text{Net Income}}{\text{Total Assets}} \times \frac{\text{Total Assets}}{\text{Equity}} = \frac{\text{Net Income}}{\text{Equity}}$$

Table 2 reveals the reasons for both South Carolina's relative decline in ROA and Georgia's superior ROE.[3] First, until 1981, South Carolina banks were able to maintain an advantage in median after tax profit margin over banks in both of the neighboring two states. Significantly, however, Georgia banks gained relative to those in South Carolina in each year, finally surpassing them in 1981. North Carolina's after tax profit margin was considerably less than that in the other two states except in 1981. A large increase for that year enabled North Carolina banks to record a slightly higher median after tax profit margin than banks in South Carolina.

Asset utilization increased each year for each state, again except for North Carolina in 1981. Through 1980, this measure of performance was highest for Georgia banks, with North Carolina and South Carolina banks close behind. Because asset utilization generally does not vary much across the three states in any one year, the after tax profit margins appear as the reason for the relative performance in ROA for the banks.

Second, the superior ROE for Georgia banks is explained with the leverage ratios. Although lagging slightly behind North Carolina banks in 1978-'80 in this measure, Georgia banks still employ a significantly higher amount of leverage than banks in South Carolina. This greater reliance on debt and deposits instead of equity as a source of financing results in a greater return on equity.

The overall trends in these three ratios parallel those for all banks in the country and reflect the general increase in interest rates over the period as well as the loss of deposits to investments outside the banks. Higher interest rates increase gross revenues and thus asset utilization ratios, but also raise the cost of borrowed funds, reducing profit margins. Comparatively higher interest rates in alternative investment lead to a decline in deposits and reduce the desirability of debt financing. Therefore, equity financing is used to a greater extent, lowering the leverage component.

PROFIT MARGINS AND SOURCES OF FUNDS

In Table 3, profit margins before taxes and security transactions are presented. Readily evident are two items of interest. First, the generally superior performance of South Carolina banks is again apparent. Second, the deteriorating performance relative to Georgia is more pronounced. When

[3]Because median figures are reported here, the values from Table 2 cannot be used in these formulas to generate the values shown in Table 1.

compared with the after tax profit margin in Table 2, these figures lead to several implications. The effects of taxes and security transactions are greater for South Carolina banks than for those in North Carolina or Georgia. Therefore, either tax planning through the purchase of municipal securities and the careful use of the provision for loan losses expense, or the performance of the securities portfolio has lagged relative to the other two states. (Actually, the securities portfolio contributed little to the performance of any of the states.) The reduction in the difference between the before tax profit margin of banks in Georgia and those in South Carolina suggests a relative improvement in Georgia's management of operating expenses or operating revenues. The sharp decline in this measure for South Carolina banks in 1981, however, indicates that South Carolina banks did not respond as well to deregulation and economic pressures in that year.

Table 3 also shows the extent to which the banks used demand deposits to finance assets. As far as accounting profitability is concerned, demand deposits and equity are costless because there are no explicit interest payments on either. The persistently greater use of these sources of funds by South Carolina banks lowers their operating expenses, and raises both before and after tax profit margins. This, then, is another important factor in explaining the superior return on assets observed for those banks. The lower level of this measure for the Georgia banks, along with their higher leverage component, indicates that the Georgia banks rely to a greater extent on borrowed and interest bearing funds.

TABLE 3. Additional Performance Measures for South Carolina, North Carolina, and Georgia Banks: Selected Years

Year	Before Tax Profit Margin			Demand Deposits as a Percentage of Total Assets		
	South Carolina	North Carolina	Georgia	South Carolina	North Carolina	Georgia
1972	24.17	20.00	20.58	48.66	40.00	42.44
1975	18.18	13.57	14.86	42.91	33.25	37.19
1978	18.88	15.12	16.70	41.00	32.70	35.98
1979	21.76	14.37	18.09	39.31	29.91	32.79
1980	19.50	12.52	17.31	34.51	27.27	29.53
1981	13.91	10.65	14.76	26.80	23.79	23.21

Source: Same as Table 1, this article.

CONCLUSIONS AND IMPLICATIONS

The performance of South Carolina banks 1972-'81 was exemplary despite the economic and regulatory uncertainty of the period. When compared with the performance of banks in the neighboring states of North Carolina and Georgia, generally superior returns on assets but not equity are found. Superior returns on assets were the result of maintaining a conservative approach to financing the banks, relying to a greater extent on demand deposits and equity, and thus lowering operating expenses. The reliance on equity, however, prevented the superior ROA performance from also becoming a superior ROE performance.

Whether or not South Carolina banks will be able to return to a position of higher returns on assets may be in doubt. In 1980, after tax profit margins were only slightly better for banks in South Carolina than in Georgia, primarily because the former paid higher effective tax rates and had somewhat poorer performing security portfolios. The higher level of asset utilization in Georgia banks in that year was enough to give them a higher median ROA. In 1981, Georgia banks reported higher before and after tax profit margins to maintain their higher median ROA. Unless South Carolina banks respond with aggressive cost controls and revenue generation, they will not be able to regain their superior returns on assets in the region.

South Carolina banks' greater reliance on equity in a region experiencing economic growth has additional implications for the future. When true interstate banking is approved, South Carolina banks will be well positioned. Their size (average total assets of $104.8 million, as compared with $410.4 million in North Carolina and $60.1 million in Georgia in 1981) and their growth (compound annual growth in total bank assets 1972-'81 of 9.97 percent, as compared with 10.55 percent and 8.73 percent for North Carolina and Georgia, respectively) plus the high return on asset performance and control of a significant deposit base will make them attractive candidates for acquisition or expansion.

USC College of Business Administration Update: Foundation Fellows Named

By Virginia Ann Van Seters

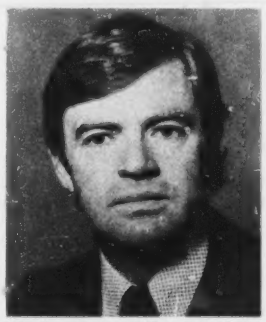
In August 1982, The University of South Carolina-Business Partnership Foundation's Board of Trustees announced that Dr. Michael B. Connolly, Dr. R. Blaine Roberts, and Dr. John F. Willenborg had been selected as Foundation Fellows for 1982-'84. This brought to 17 the total number of Fellows named in the program's 5-year history.

It all began in September 1977 when the USC-Business Partnership Foundation established the Foundation Fellows Program to recognize scholarship and academic contributions of members of the faculty of the USC College of Business Administration. More specifically, this program supplies salary supplements that enable the College of Business Administration to recognize truly outstanding members of its faculty with respect to their proven leadership and scholarship and their potential ability to lead the College of Business Administration in qualitative advancement. It is both a reward system for past performance, and a recognition program for continuing and potential excellence.

Any member of the faculty of the USC College of Business Administration is eligible to be considered for appointment as a Foundation Fellow. Recommendations for appointment are submitted by the Dean of the college to the Faculty Development Committee of the Board of Trustees of the Business Partnership Foundation. The committee members then make their selections and submit them to the full Board of Trustees for their approval or disapproval. The appointments are for two years, and are renewable at the discretion of the Trustees.

Miss Virginia Ann Van Seters is Associate Editor for the Division of Research and Editor of the Faculty-Staff Newsletter in the College of Business Administration, The University of South Carolina. An honor graduate of USC's College of Journalism, Miss Van Seters has won numerous professional awards. Prior to joining the staff of the College of Business Administration, she also worked in legislative reporting and public relations.

Since 1977, those faculty selected to serve as Foundation Fellows, in addition to Drs. Connolly, Roberts, and Willenborg, have been Dr. Ronald M. Copeland, Dr. J. Stanley Fryer, Dr. Arch G. Woodside, Dr. James L. Cochrane, Dr. S. Travis Pritchett, Dr. James B. Edwards, Dr. William W. Mobley, Dr. Phillip L. Cooley, Dr. William R. Folks, Jr., Dr. Robert E. Markland, Dr. Rodney L. Roenfeldt, Dr. Donald G. Frederick, Dr. James B. Henry, and Dr. Joseph C. Ullman. Brief sketches of these fellows have appeared in previous issues of this publication. Those of Drs. Connolly, Roberts, and Willenborg are included below, in alphabetical order.



Dr. Michael B. Connolly, 41, Professor of Economics. A native of Ireland, Dr. Connolly served as a member of the faculties of Harvard University, the University of Florida, Uppsala University (Sweden), the Graduate Institute of International Studies (Switzerland), and the Bologna Center of Johns Hopkins University (Italy) before coming to USC in 1978. He is also a Guest Lecturer at the Economie Internationale, Centre Universitaire des Antilles et de la Guyane (Martinique) and the University of Paris where he frequently delivers his lectures in French; and has lectured in Uruguay, Brazil, and Venezeula.

An Associate Editor of the **Quarterly Journal of Economics** for 14 years, Dr. Connolly is a former Associate Editor of the **Review of Economics and Statistics** (11 years) and member of the Board of Editors of the **Southern Economic Journal.** He received an attestation d'Etudes from the Université de Bordeaux in 1963, a B.A. Degree (Phi Beta Kappa) from the University of California at Berkeley in 1964, and M.A. and Ph.D. Degrees in Economics from the University of Chicago in 1967 and 1969, respectively. He is a member of the American, Western, and Southern Economic Associations, the Royal Economic Society, and the Econometric Society.

The recipient of a 3-year Ford Foundation International Studies Grant and a National Science Foundation Grant, Dr. Connolly served as a Member of the Jury de Science Economique, Concours de Recrutement de Maitres de Conférence, Université de Tunis in Tunisia in 1980 and is a Membre d'Honneur, Association des Anciens de Vizioz. He has also presented professional papers for the Second International Conference on the Financial Development of Latin America, the World Bank, the International Monetary Fund, the U.S. Department of State, the U.S. Treasury Department, the Federal Reserve System's Board of Governors, and the Paris-Dauphine Conferences on International Monetary Problems; and has authored or coauthored 2 books and 19 articles in such publications as the **Journal of Political Economy,** the **American Economic Review,** the **Quarterly Journal of Economics,** the **Journal of International Economics, De Economist,** the **Canadian Journal of Economics, Economica,** the **Journal of International Money and Finance,** and the **Journal of Money, Credit, and Banking.**

Dr. R. Blaine Roberts, 38, Professor of Economics. Dr. Roberts joined the faculty of the College of Business Administration at The University of South Carolina in 1978 after serving as a Special Assistant to Commissioner Lanzillotti of the U.S. Price Commission; Deputy Director of the Division of Price Analysis, Office of Price Policy, U.S. Price Commission; a Research Associate at The Brookings Institution; a member of the faculties of Iowa State University and the University of Florida; Director of the Florida Econometric Model; and Editor of **The Florida Outlook.**

Recipient of the Fort Hays Kansas State College Outstanding Alumnus Achievement Award, the USC College of Business Administration's Alfred G. Smith Excellence in Teaching Award, and a National Science Foundation grant, Dr. Roberts earned a B.A. Degree in Economics (with distinction) at Fort Hays Kansas State College in 1966 and a Ph.D. Degree in Economics at Iowa State University in 1969. A member of the Atlantic, American, Western, and Southern Economic Associations, the Econometric Society, and the American Finance Association, he has also authored or coauthored 19 professional papers, 5 books, 5 book chapters, and 16 articles in the **American Economic Review,** the **Bell Journal of Economics,** the **Quarterly Journal of Economics,** the **Journal of Political Economy,** the **Southern Economic Journal,** the **Quarterly Review of Economics and Business,** the **Review of Economics and Statistics,** the **Monthly Labor Review,** and the **Journal of Regional Science.**

Dr. John F. Willenborg, 41, Director of the Charles E. Daniel Center for Management Education and Professor of Marketing. A member of the faculty of the College of Business Administration at The University of South Carolina since 1969, Dr. Willenborg is a former member of the faculties of Washington and St. Louis Universities. He founded the USC Consumer Panel and served as its Director 1972-'79, and was Director of the Center for Marketing Studies in the College of Business Administration during the same period.

Dr. Willenborg holds a B.A. Degree in Business Administration from Loras College and M.B.A. and D.B.A. Degrees in Marketing from Washington University. In the 4 years he has been Director of the Daniel Management Center, the number of professional development programs offered by the center has tripled and the number of program attendees has more than doubled. The center's market has been expanded to include most of the Southeast, although South Carolina remains the principal area served. The Daniel Management Center is now one of the Southeast's major providers of management and professional education.

Dr. Willenborg is the author or coauthor of 1 book, 2 cases, 20 professional papers, 14 monographs and research reports, and 15 articles in such publications as the **Journal of Consumer Research,** the **Journal of Business Research,** the **Journal of Marketing,** the **Southern Economic Journal,** the **Journal of Risk and Insurance,** and the **Business and Economic Review.** He has presented scholarly papers at meetings of such professional organizations as the American Institute for Decision Sciences, the American and Southern Marketing Associations, and the Association for Consumer Research. He has served as a reviewer of books for Random House, Inc. and has been a consultant to many private businesses and nonprofit organizations on marketing research and marketing management. He has chaired many USC and BA committees and has worked on committees of such community organizations as the South Carolina Chamber of Commerce, the Greater Columbia Chamber of Commerce, and the United Way.

The Management Bookshelf

By Dwight Gardner, Business Librarian, M.B.A., M.S.L.S.

The Management Bookshelf is a service to our readers provided by the Elliott White Springs Library of the College of Business Administration of The University of South Carolina.

THE McGRAW-HILL GUIDE TO EFFECTIVE BUSINESS REPORTS

by Roy Poe
McGraw-Hill Book Co.
1221 Ave. of the Americas
New York, NY 10020
1982, 208 pp., $19.95

Poe covers the preparation of all types of written communications, from the one-page memo through the business letter to the formal report. He emphasizes those writing skills and techniques that managers need to prepare their most frequent, informal reports. He utilizes examples of poorly written reports with suggested corrections as a learning device.

THE WORK STRESS CONNECTION: HOW TO COPE WITH JOB BURNOUT

by Robert Veninga and James Spradley
Little, Brown & Co.
34 Beacon Street
Boston, Mass. 02106
1981, 314 pp., $12.95

This volume is largely based on interviews conducted by the authors with individuals concerning the stressful aspects of their careers. The authors define five stages of burnout and illustrate them with examples drawn from these case histories, allowing readers to determine their own state of work stress. They also discuss methods for coping with, and alleviating, job related stress.

GUIDE TO FINANCIAL MARKETS

by Charles Geisst
St. Martins Press
175 Fifth Ave.
New York, NY 10010
1982, 150 pp., $20.00

Geisst provides information on the structure and function of all major financial markets, both foreign and domestic. His analysis includes both capital markets, such as stocks, bonds, and money markets, and hedging markets, such as foreign exchange, options, and commodities. He describes the trading techniques and financial instruments applicable to each type of market.

SALARY STRATEGIES: EVERYTHING YOU NEED TO KNOW TO GET THE SALARY YOU WANT

by Marilyn Kennedy
Rawson, Wade Publishers
630 Third Ave.
New York, NY 10017
1982, 242 pp., $12.95

This book explains the rules of the game of salary negotiations. It covers how employers set salaries, how the reader can determine the market value of his job skills, and which strategies to employ in negotiating for money. It also includes career planning advice designed to maximize the reader's earnings potential for the future.

GETTING PUBLICITY

by M. Winston
John Wiley & Sons
605 Third Ave.
New York, NY 10016
1982, 144 pp., $8.50 paperback

Winston examines the various types of publicity programs designed to get your company or its products mentioned by newspapers, magazines, radio, and/or television. He includes sample press releases and PR photos with explanations on their relative effectiveness.

THE 30 MOST COMMON PROBLEMS IN MANAGEMENT AND HOW TO SOLVE THEM

by William Delaney
AMACOM
135 W. 50th St.
New York, NY 10020
1982, 175 pp., $14.95

This book shows how to handle problems in such areas as office politics, employee discipline, and career development. Problems and solutions are discussed and a survey of the habits and attitudes of upper management is included. Readers, therefore, can compare their own traits to those of top executives. There are also special tips for women managers.

* * *

Readers are invited to submit titles of books that they wish to call to the attention of others.

STATISTICAL INDICATORS OF SOUTH CAROLINA BUSINESS

ITEMS	June 1982	June 1981	Latest Month Percentage Change from Year Ago
Total Bank Deposits ($ millions)[f]	$ 6,789.3	$ 5,519.8	+ 23.0
Demand	3,046.4	2,390.5	+ 27.4
Time	3,742.9	3,129.3	+ 19.6
Total Bank Loans ($ millions)	NA	NA	—
Savings in Savings and Loan Associations ($ millions)[b]	NA	NA	—
Sales and Use Tax Collections ($ thousands)	51,327.5	49,127.8	+ 4.5
Labor Market:			
Civilian Labor Force (thousands)	1,513.4	1,450.9	+ 4.3
Employment	1,339.4	1,324.1	+ 1.2
Rate of Unemployment (percentage)[c]	11.5	8.7	+ 32.2
Nonfarm Wage and Salary Employment (in thousands)[c]	1,178.3	1,210.2	- 2.6
Manufacturing[c]	359.0	392.5	- 8.5
Contract Construction[c]	66.1	73.4	- 9.9
Transportation and Public Utilities[c]	54.7	53.6	+ 2.1
Wholesale and Retail Trade[c]	238.8	235.5	+ 1.4
Finance, Insurance, and Real Estate[c]	52.4	50.5	+ 3.8
Services, Mining, and Miscellaneous[c]	176.4	172.6	+ 2.2
Government[c]	230.9	232.1	- 0.5
Average Hourly Earnings, All Manufacturing (in dollars)	$ 6.55	$ 6.09	+ 7.6
Initial Unemployment Claims Filed in South Carolina	70,664	26,711	+164.6
Placements by South Carolina Employment Offices (nonagricultural)	7,195	14,724	- 51.1
Indexes of Prices Received by Farmers (1966-68=100)			
All Farm Products	127	123	+ 3.3
All Crops	156	150	+ 4.0
Livestock and Products	89	89	0
S.C. Parity Ratio	81	82	- 1.2
New Motor Vehicle Registrations			
Cars	7,569	8,166	- 7.3
Trucks	2,285	2,427	- 5.9

	January 1982	January 1981	First 6 Months 1982	First 6 Months 1981	First 6 Months Percentage Change
Valuation of Building Permits Issued ($ millions)[d]					
Total for all S.C. Counties	$348.6	$157.5	$989.3	$823.1	+ 20.2
Available County Data					
Aiken	10.8	3.0	20.9	17.5	+ 19.4
Berkeley	4.9	3.2	19.9	18.9	+ 5.3
Charleston	17.0	28.8	140.2	107.3	+ 30.7
Dorchester	1.8	2.1	20.9	15.2	+ 37.5
Lexington	8.2	9.4	38.9	25.3	+ 53.8
Richland	11.7	7.0	74.2	62.4	+ 18.9
Greenville	21.3	13.2	98.0	86.0	+ 14.0
Pickens	2.0	2.6	8.7	20.1	- 56.7
Spartanburg	7.9	11.4	35.9	67.8	- 47.1

[a]Less than one-half of 1 percent.

[b]Due to the termination of certain data series by the Federal Reserve Bank of Richmond, this series has been replaced by the Federal Home Loan Bank of Atlanta.

[c]Ibid., the South Carolina Employment Security Commission.

[d]These amounts are now being reported in millions of dollars instead of thousands of dollars.

[e]Not available.

[f]Institutions with total deposits of $15 million or more as of 12/31/'79 and including AT's accounts, telephone and preauthorized transfer accounts, and NOW accounts/share drafts.

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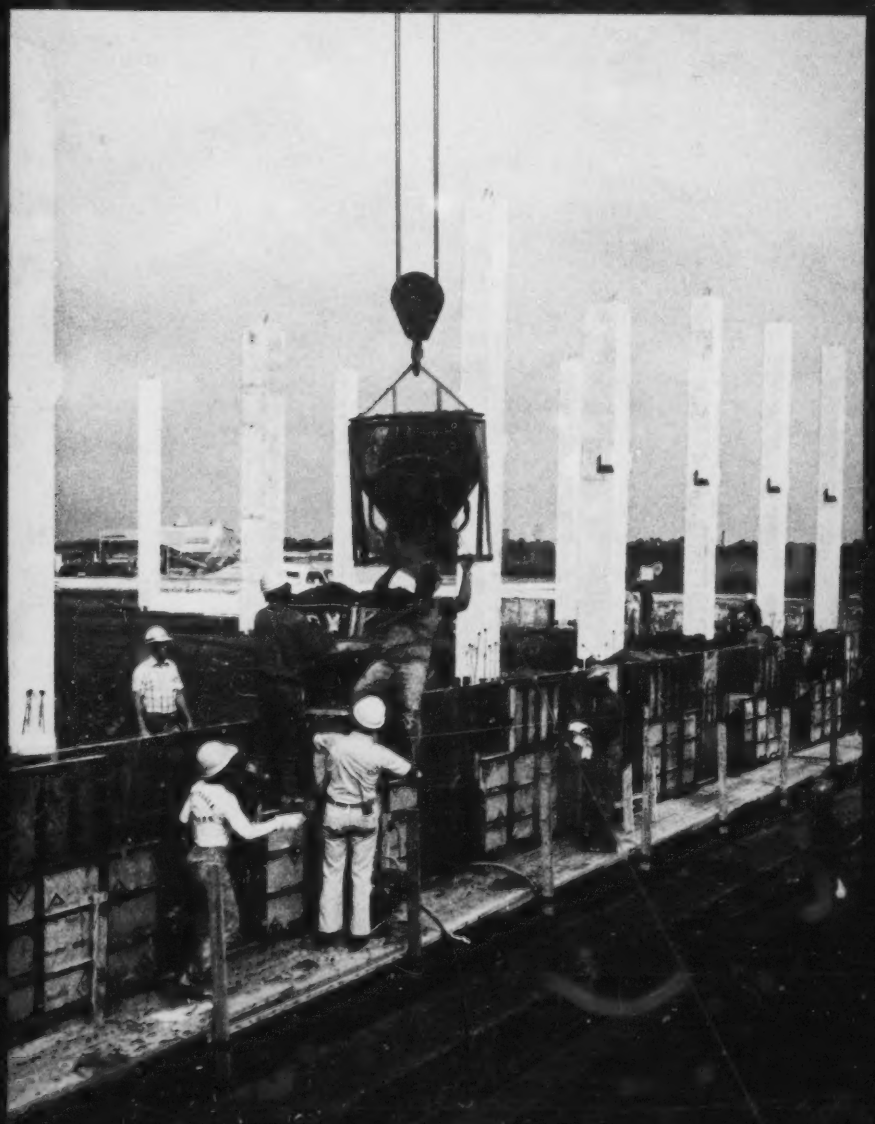
Industrial Development in South Carolina



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November 1982

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"The State of Economic Development in South Carolina"
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"Industrial Development at the Community and County Level"
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27 **Bottom Lines,** a regular feature by Dr. James B. Edwards, Professor of Accounting and expert consultant to Management. In **Federal Tax Lines,** Dr. Edwards studies the Tax Equity and Fiscal Responsibility Act of 1982, and alerts readers to its highlights.

33 After examining **The Process of Industrial Development in Smaller Communities and Rural Areas,** Fred J. Gassaway of Central Electric Power Cooperative, Inc. concludes that state and federal legislation programs, when targeted to specific enterprise zone areas, can enhance the community's ability to attract new industries.

40 James L. Hammond, Jr., Founder of Hammond and Associates, describes **An Innovative Approach to REDI: Rural Economic Development** and says that the Rural Economic Initiative Program developed by this state has already created 130 new jobs and expects to establish 250 more over the next 3 years.

43 In **Industrial Development in South Carolina: An Evaluation,** Ms. Nancy Grden-Ellson of USCs College of Business Administration gauges the state's industrial development progress and uses that assessment as a basis for suggesting new directions.

53 James M. Black, Editor of the **Business and Economic Review,** provides readers a **10-Point Checklist For Planning and Executing a Facilities Expansion Program.**

55 **The Management Bookshelf,** a regular feature in which Dwight Gardner, USC BA's Business Librarian, reviews books of interest to business practitioners.

56 **Statistical Indicators of South Carolina Business.** A regular feature, listing the latest available data.

business and economic review

Vol. XXIX, No. 2 November 1982

Division of Research
College of Business Administration
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Columbia, South Carolina 29208

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Virginia Ann Van Seters, Associate Editor

Opinions expressed in this publication are those of the authors, and not necessarily those of the Division of Research or the University.

Articles submitted for consideration for publication should concern business and economics topics of interest to managers in the private or public sectors. All manuscripts should be 12-26 double-spaced, typewritten pages, in English. Graphs, mathematical and quantitative data, charts, and tables are acceptable. Authors should submit 2 copies of each manuscript plus a vita sheet and a photograph. Upon publication, 6 complimentary copies of the journal are sent to the authors, with additional copies available upon request. Manuscripts to be considered for publication should be sent to: James M. Black, Editor, **Business and Economic Review,** College of Business Administration, The University of South Carolina, Columbia, S.C. 29208.

Published in Oct., Nov., Dec., March, April, and May by The University of South Carolina as a service for those interested in business and economic matters.

This month's cover. An example of Industrial Development in South Carolina is Union Camp Corporation's new paper mill being built in Eastover. Here Daniel Construction workers prepare the foundation for the finishing, shipping, and storage warehouse. Upon completion in mid-1984, the plant will produce 600 tons per day of bleached paper products. (Photo by Bruce Flashnick, Columbia.)

James Menzies Black
1913-1982

Jim Black was a unique man. Something of a Renaissance Man, in fact, equally at home in the arcane fields of industrial management and literature, a respecter of the written and spoken word. He published in such diverse journals as **Dun's Review, The New Yorker,** and **The Saturday Evening Post.** He was author or coauthor of numerous books in the management field.

Jim graduated from USC in 1935, obtained his M.A. Degree here in 1937, and served in the Office of Strategic Services in the Second World War. In 1938, he married Virginia Todd.

His career reflected his many talents. After 26 years in business with such organizations as the American Management Association, the Pennsylvania Railroad (as Corporate Assistant Director of Personnel), and the Daystrom Corporation, he returned to his native Columbia to become Distinguished Lecturer in The University of South Carolina's College of Business Administration, and Director of Special Programs and Seminars in the Daniel Management Center. From 1979 until his death, he was the Editor of this publication.

Above all, to those who were fortunate in working with him, Jim was a collegial man, an interesting person to talk to, who, in relaxed moments, shared tales of his experiences in the business world and of his early life in Columbia. He served the College of Business Administration and the university in many ways. He was a credit to us, and we shall miss him.

Hugh S. Norton,
Dewey H. Johnson Professor of Economics
and
Former Editor of the
Business and Economic Review

Announcing: The Institute of Information Management, Technology, and Policy

By Virginia Ann Van Seters

Dr. James F. Kane, Dean of The University of South Carolina's College of Business Administration, is very pleased to announce the establishment of the Institute of Information Management, Technology, and Policy in BA's Division of Research. Details are presented below.

The Institute of Information Management, Technology, and Policy began operations formally this fall semester. Dr. Donald A. Marchand, Associate Professor of Management Science, is the institute's Director.

According to Dr. Marchand,

> the institute will focus on performing both basic and applied research concerning (1) the management of information resources and systems in business and government, (2) the development and implementation of white-collar and industrial productivity and automation programs, and (3) the assessment of the impacts of computer and communications technologies on business, government, and the home. The institute will also provide consultative services to business and government agencies as well as develop continuing education programs and conferences for business executives and public managers. The basic intent of the institute is to be a resource center within the university and the state of South Carolina in dealing with the rapid transition of our society from an economy based exclusively on agriculture and industrial production to one based on information technologies, products, and services.

Information and the capability to use it advantageously are vital resources in business and commerce today, as well as crucial bases for economic power, both domestically and internationally. Moreover, information technology (including microelectronics, computers, communications technologies, and office automation) permeates nearly every aspect of life, affecting activities in commerce, government, and the home.

The American information industry is impressive in both size and scope. Over the next five years, United States businesses will spend over $1 trillion in information processing. The information industry is growing at an average yearly rate of 16 percent with many sizable sectors running at 25 percent and higher. By 1986, there will be over 8 million computers installed in the United States, over 17 million typing work stations (about three times the number of keyboards installed today). In 1981, the United States information processing market was more than $130 billion (four times the real dollar size of just a decade ago). Moreover, United States information and communications technologies are second only to agricultural products as our leading export category.

Since 1980, over half the United States work force has been making a living in an information-related job. In South Carolina, over 46.5 percent of the labor force is currently in white-collar occupations that are information intensive.

Given these significant changes in the national and state economy, it is clearly to our advantage to understand and anticipate the impacts of information technology on business and government and to start designing strategies and plans for coping with the

Miss Virginia Ann Van Seters is Associate Editor for the Division of Research and Editor of the Faculty-Staff Newsletter in the College of Business Administration, The University of South Carolina. An honor graduate of USC's College of Journalism, Miss Van Seters has won numerous professional awards. Prior to joining the staff of the College of Business Administration, she also worked in legislative reporting and public relations.

technical, economic, organizational, and social choices open to us.

The institute represents a leading edge effort to establish a center for research into the management and policy implication of the information age in our state and nation. While there are a few research institutes at Harvard, MIT, Georgia Tech, and other schools that focus on aspects of information policy or office automation, there is no other group in the United States that combines a focus on the interactions of information management, technology, and policy.

The Institute of Information Management, Technology, and Policy will be organized around a core team of eight professionals with backgrounds in business administration, public management, computer science, and law. It will also draw on faculty resources within the USC College of Business Administration and other departments of the university such as Computer Science, Engineering, and Information Science. It will involve graduate students in its research activities which should result in several doctoral and masters' theses. During its first year, the institute will perform research under contracts to the Division of General Services of the South Carolina Budget and Control Board to improve state government's management and use of information resources and technology. In addition, the institute also will be working to develop services and programs of interest to the business community, and will be seeking substantial outside funding from the private sector for its work.

For more information concerning the Institute of Information Management, Technology, and Policy and its operations, please contact Dr. Marchand at 803-777-5766 or 803-777-2510.

The State of Economic Development in South Carolina

By Edward B. Burgess

South Carolina has an economic development program that is the envy of most other states. In the minds of many business leaders, South Carolina is one of the best places to invest. This is a significantly different image than the perception held by many 20 years ago.

In the early 1960's, when the state first embarked on a serious course of industrial development, it was difficult to convince business executives responsible for locating industrial plants even to consider South Carolina. That perception has changed so dramatically that now these "facility locators" more than likely would have to explain why they did not consider South Carolina in their evaluations, if, in fact, they did not.

This shift in image can be attributed to a number of factors. In the early 1960's, South Carolina began energetically to promote the state as a good place for manufacturers to invest. At the same time, the concept of technical education was introduced. In the late 1960's, special tax incentives were passed and the use of tax free industrial revenue bonds was authorized. These special programs to encourage investments, coupled with an aggressive advertising and promotional program, helped to establish South Carolina as an attractive place in which to do business. At the same time, all of the South was gaining in popularity, and the press introduced the "Sunbelt-Frostbelt" phenomenon which contributed significantly to South Carolina's recognition. As a Sunbelt state with an awareness built from 10 or more years of image building advertising, South Carolina became a known quantity in the growing Southeast. Other factors, such as national tele-

Edward B. Burgess is Associate Director for Planning and Research for the South Carolina State Development Board. A graduate of the USC College of Business Administration, he joined the Board in 1967 after working several years in private industry. Past Chairman of the Research Division of the National Association of State Development Agencies, Burgess is presently a member of a number of advisory committees for state growth and planning policy. He has also served as special consultant to banks and other private organizations, and authored a number of articles on the state's development strategy.

vision exposure through collegiate athletics and even controversial news items, called attention to South Carolina and helped to build an awareness of the state and its resources.

A major factor in the state's development in recent years has been the favorable experience of many new firms that located multiple facilities in South Carolina because of their successful first ventures. Such major United States and foreign firms as General Electric, Westinghouse, J. P. Stevens, Milliken & Co., Georgia Pacific, Michelin, DuPont, BASF, B. F. Goodrich, Burlington Industries, and a host of others have built more than one new plant each in the state in the last 20 years.

An estimated 165 of **Fortune** magazine's 500 largest United States firms have plants in South Carolina. About 26 percent of these and all other manufacturing plants presently in the state have been constructed in just the last 10 years. More impressive as a testimony to South Carolina industrial development success is the fact that about one-half of the capital invested and new jobs created each year is from the expansion of existing industries — many of which were not in the state before South Carolina launched its aggressive development program.

This year is not the best year on which to base the success of South Carolina's development program. The economy of the state is going through a "readjustment" period brought on by an ailing national economy. Unemployment in South Carolina is above the national average and at comparable levels of seven years ago during the 1974-'75 recession. However, despite the fact that unemployment levels are up, employment in most sectors still exceeds 10 years ago, and total employment is the highest in the state's history.

KEEPING UP

Between 1970 and 1980, state population increased by nearly 530,000. The labor force increased by 384,000, and employment increased by 336,000. Simple mathematics indicates that it required, on the average, about 33,600 new jobs annually to accommodate the growth in the state's population and labor force. Unemployment in 1980 was 96,000, twice the 1970 level. Therefore, in order to maintain the 1970 level of unemployment of 4.8 percent, and to accommodate the growth in population between 1970 and 1980, more than 38,000 new jobs would have been required annually. This is the minimum requirement. Consider all the jobs eliminated during that period that were replaced by new jobs. Some businesses closed permanently, some reduced employment because of shrinking or displaced markets, and still others installed new equipment or machinery that required fewer workers.

Estimates have been made that job losses run as high as 50,000 annually. These losses are illustrated in part by the shift in textile employment. In 1970, the industry employed 149,300 workers. By 1980, its labor requirements had declined to 137,500, representing a net loss of 11,800. Today, textile employment is around 120,000, or 29,300 less than in 1970. This does not represent anything near 50,000 annually, but it does illustrate significant job losses and the need for replacement jobs. Tabulations of the State Development Board show that manufacturers, new and existing plants, announced 138,000 new jobs during the 1970-'80 period.

Manufacturing employment in 1970 was about 339,000. By 1980, it had grown to 393,000 for a net gain of 54,000. In comparing this net gain to the number of new jobs created, it becomes even more apparent that job losses each year are substantial — 8,400 just in manufacturing. If there is a positive multiplier for manufacturing jobs, then it stands to reason there is a correlating negative multiplier: for every 100 jobs lost in manufacturing, there is perhaps a corresponding loss of 70 to 80 nonmanufacturing jobs.

When talk of a national recession became serious in 1979, the State Development Board began keeping tabs on plant closings. The board's records began in September 1979. Since that time, 78 manufacturing plants representing over 11,700 jobs have closed permanently. In 1981, 27 plants closed, and since January of 1982, 22 plants have shut down. With such losses, it becomes a frantic battle to maintain the status quo. More currently, 1982 data through July indicate that 32 new plants have been announced in the state with a potential employment of 1,700. During that same period, 22 plants with a total employment of nearly 3,100 have closed. The 1982 data indicates that more jobs were lost to plant closings than were gained from new plants.

In addition to the substantial job losses, these data demonstrate a disturbing trend in terms of new jobs created. The new plants will require less labor, due either to sheer size or the use of more advanced technology, than did the old plants. A more current illustration of this fact is reflected in the 1982 year to date statistics. The average employment of plants closed so far this year is 140 while the average employment of new plants announced is only 53. The question becomes, "Can

South Carolina's work force survive on just high technology alone?" "Can the state attract enough high skill jobs, and does it have, or can it train, workers to fill them?"

THE CONSTANT NEED

It is much easier to recognize the need for a well thought out development strategy during times of high unemployment and job losses than during good times. The infusion of new capital, the establishment of new jobs, new retail sales, bank deposits, construction, and other new economic activity are the catalysts that keep a state's economy moving. Even though the recession is taking its toll on the jobs and income of many workers in South Carolina, the impact has been lessened by the growth momentum the state had going into the downturn.

Manufacturers are investing in the state at record levels. Although there have been some bumps along the way, the trend has continued upward. Calendar year 1981 set an all-time record of new and expanded plant investment of $2.4 billion. Each of the two preceding years resulted in more than $1.5 billion investment, establishing a three-year record of $5.5 billion.

In terms of its relative size, South Carolina does better than most states. Of the Southeastern states that consistently tabulate and report capital investments, only Alabama performed more successfully on a per capita basis during the last five years. (See Table 1.)

TABLE 1. Southeastern States' Share of Population and Capital Investment by Manufacturers*

State	1980 Population (000)	1977-'81 Investments ($ millions)	Per Capita Investment
Alabama	3,890	$10,916	$2,806
Georgia	5,464	N/A	N/A
Kentucky	3,661	5,807	1,586
Mississippi	2,521	5,768	2,288
North Carolina	5,874	10,253	1,745
South Carolina	3,119	7,543	2,418
Tennessee	4,591	4,529	986

Source: U.S. Department of Commerce, Bureau of the Census, **1980 Census of Population; and state development agencies.**

*Only states reporting investments are included.

It has been argued that these record investments are not relative because inflation is responsible for most of the growth. True, inflation has helped to make these investments look bigger than they would have been had they been measured in constant dollars. Even discounting for inflation, though, South Carolina's record is still impressive. In constant 1967 dollars, annual capital expenditures of new and expanding industries in South Carolina have grown from $275 million to 1970 to over $879 million in 1981, illustrating the more capital intensive nature of new manufacturing facilities. (See Table 2.)

TABLE 2. South Carolina Manufacturing Investments and New Jobs 1970-'81

Year	Investment ($000)	New Jobs	Investments Adjusted For CPI ($000)	Investment Per Job Adjusted For CPI
1970	$ 319,456	10,530	$274,680	$26,090
1971	473,391	12,272	390,260	31,800
1972	502,563	13,449	401,090	29,820
1973	1,229,690	15,662	923,880	58,990
1974	666,055	12,654	450,950	35,640
1975	511,445	6,020	317,270	52,700
1976	487,685	9,532	286,030	30,010
1977	1,235,171	17,602	680,530	38,660
1978	857,233	14,173	438,710	30,950
1979	1,541,135	21,598	707,920	32,780
1980	1,515,643	14,530	613,620	42,230
1981	2,394,152	15,949	879,230	55,130

Source: South Carolina State Development Board, Planning and Research Division.

Every state in the nation has basically the same objective for its development program: attract capital intensive, high technology industries that pay higher wages; keep unemployment at a minimum; diversify the economic base for stability; and give everyone an opportunity to work who wants to work. The degree of success depends on a number of factors.

Overall business climate is the primary consideration and consists of economic and attitudinal factors affecting profits. Total unit cost of production is the control measure that includes labor, taxes, utility, transportation, land, construction, and capital cost.

A significant factor for new industries, particularly those using new technologies, is the cost of training workers to a proficiency level adequate to turn out a quality product. In South Carolina, this cost factor is minimized by excellent educational and occupational training programs. The Commission for Technical and Comprehensive Education has been praised in particular for its ability to train workers in occupational skills required by today's industry. The Special Schools Division of TEC has been instrumental in South Carolina's development program. Its pre-employment training program for production workers is designed to provide the basic skills required in the production environment of a particular plant. Vocational education at the secondary and post-secondary

levels has also played an important role in the development of a semi-skilled and skilled work force in South Carolina.

Noneconomic factors that help to shape the business climate generally are lumped into categories of attitudes. Some attitudinal factors are quantifiable while others are not. Union membership and work stoppages due to strikes are seen by industry as measures of the attitude of the work force and management. Tax policy and changes in tax policy are growing influences on profits and indicators of government attitudes and policies. With the keen competition among states for jobs, receptivity of the state and individual communities is a major attitudinal factor. If industry feels it is not wanted by a community, it generally will look for a more encouraging climate. The fact that South Carolina demonstrates fiscal responsibility and is required by the state constitution to operate with a balanced budget projects an attitude understood by most businesses. Since business must run in a responsible manner, it expects government to do the same. Although these attitudinal factors do not bear as directly on profits as labor and utility costs, they are important in the location decision process. Often perception of attitudes is the deciding factor when South Carolina is pitted against another state, or one community competes with another.

MEASURING THE RESULTS

As has often been repeated, the major objectives of South Carolina's industrial and economic development are to seek (1) sufficient jobs to maintain the work force, (2) a better standard of living, (3) diversification to enhance stable employment, and (4) equal opportunity for all citizens and areas of the state. These objectives have been pursued with the idea of maximizing economic impact while minimizing adverse environmental impact — a task not easily achieved or always met to the satisfaction of all interested parties.

The system of establishing jobs has worked in general. Except for times of national recession, South Carolina unemployment levels since the middle 1960's have been below the national average.

For the most part, the general welfare of the state's citizens has been improved. Wage levels, although still lagging behind national averages, have shown real growth at a rate exceeding the national average. Average hourly wages for manufacturing production workers have grown from $2.51 per hour in 1970 to $6.42 per hour as of December 1981. (See Table 3.) Growth in wages, as with consumer prices, has been fueled by inflation. South Carolina's real hourly wage growth, however, has been more than twice the national average and above most other Southeastern states. In terms of 1967 purchasing power, South Carolina had a growth of 12¢ per hour between 1970 and December 1981, as compared with only 5¢ for the nation. During the same period, Georgia gained only 7¢, North Carolina 9¢, and Florida **declined** by 4¢.

The third objective, diversification, would appear to be successful thus far. Employment trends in the state indicate that job growth in all sectors of employment, except agriculture, occurred during the last decade. Employment data for agriculture are somewhat speculative; therefore, there is some

TABLE 3. Growth in Average Hourly Wage of Manufacturing Production Workers 1970-December 1981

Area	1970		December 1981		Net Change in Constant $*
	Current $	Constant $*	Current $	Constant $*	
United States	$3.36	$2.89	$8.27	$2.94	+$.05
South Carolina	2.51	2.16	6.42	2.28	+ .12
Alabama	2.86	2.46	7.17	2.55	+ .09
Florida	2.89	2.48	6.85	2.44	- .04
Georgia	2.67	2.30	6.65	2.37	+ .07
Kentucky	3.27	2.81	7.99	2.84	+ .03
Mississippi	2.43	2.09	6.22	2.21	+ .12
North Carolina	2.46	2.12	6.20	2.21	+ .09
Tennessee	2.73	2.35	6.89	2.45	+ .10

Source: U.S., Department of Labor, **Employment and Earnings;** and U.S., Department of Commerce, **Survey of Current Business** (various tables and volumes, 1972-'82).

*Expressed in constant 1967 dollars.

TABLE 4. Employment: New and Expanded Plants For the Last 2 Decades by Industry

Industry	1960-'69		1970-'79	
	Number	Percentage of Total	Number	Percentage of Total
Food	4,927	2.9%	3,303	2.5%
Textiles	44,054	26.1	22,484	16.8
Apparel	32,069	19.0	17,519	13.1
Wood and Furniture	6,580	3.9	6,030	4.5
Paper and Printing	4,555	2.7	2,464	1.9
Chemicals	25,055	14.8	15,528	11.6
Metalworking	44,308	26.2	49,048	36.8
Remaining	7,258	4.3	17,116	12.8
Total Jobs	168,806	100.0%	133,492	100.0%

uncertainty about true employment trends for that sector. The most significant shifts in employment have been in manufacturing services, government, and wholesale and retail trade.

Although the state's manufacturing share of total employment has declined by 2.5 percent, total employment in manufacturing is up by 19 percent. Services, government, and wholesale and retail trades were all up as a percentage of total employment. The largest absolute increase was in government, mostly at the county and municipal levels. Services experienced the most significant rate of growth, increasing 75 percent in just 10 years. Manufacturing was, and still is, the largest single employer in the state, representing 30 percent of total nonfarm employment.

Within the categories of manufacturing in South Carolina there have been significant shifts in employment. During the decade of the 1960's, jobs created by new and expanding industries totaled about 169,000. (See Table 4.) Most of these jobs (45 percent) were in textile and apparel. The second largest category, metalworking, was 26 percent of the total. During the 1970's, however, metalworking accounted for a larger share (37 percent) of new jobs than did textiles and apparel (30 percent).

Measured in terms of dollars invested, the chemical industry, because of its capital intensive nature, represented the largest single category of manufacturing capital expenditures in both decades. (See Table 5.) During the 1970's, the combined investments of the chemical and metalworking industries accounted for over 62 percent of all manufacturing investments in the state.

This trend in new jobs and investment is reflected in today's employment patterns. The most significant shifts have been in metalworking and textiles. In 1960, textiles represented 54 percent of total manufacturing employment, but by 1980 it had fallen to 35 percent. (See Table 6.)

On the other hand, metalworking showed an increase, growing from 6 percent of the 1960 total to 22 percent of the 1980 total. These shifts reflect the diversification that has taken place within the manufacturing sector of the state's economy.

The fourth objective, equal opportunity for all citizens and areas, has been the most difficult to achieve. Small communities and rural areas have always presented a special challenge. Because they are, for the most part, remote from major trading areas, they have limited transportation access. Some also do not have water or sewer systems adequate to serve industry, while others have not developed the necessary leadership to support an aggressive development program.

In 1976, the State Development Board launched a special community development program to help small communities help themselves. This effort, The Governor's Rural Economic Achievement Trophy (GREAT Town) program, was designed to inform community leaders in a more effective way of the needs of business and industry and to assist the community in identifying and presenting their resources to fill those needs. To date, the program has been successful: 51 towns under 15,000 in population now qualify for the special designation of GREAT Town.

In 1979, Max Heller, Chairman of the State Development Board, appointed a special task force to study the problems and needs of the underdeveloped counties and to suggest programs that could bring about improvements. The committee's efforts established a close working relationship between the development board staff and the Governor's staff in allocating some federal monies for industrial development. The development board has also created a special staff task force to assist

TABLE 5. Investment: New and Expanded Plants For the Last Two Decades by Industry

Industry	1960-'69		1970-'79	
	Dollars	Percentage of Total	Dollars	Percentage of Total
Food	$ 49,709,000	1.3%	$ 204,010,000	2.6%
Textiles	918,456,000	23.3	977,906,000	12.5
Apparel	99,424,000	2.5	82,311,000	1.1
Wood and Furniture	73,253,000	1.9	170,330,000	2.2
Paper and Printing	329,337,000	8.4	395,285,000	5.1
Chemicals	1,366,664,000	34.7	2,908,782,000	37.2
Metalworking	793,849,000	20.1	1,950,159,000	24.9
Remaining	309,682,000	7.8	1,135,041,000	14.5
Total Investment	$3,940,374,000	100.0%	$7,823,824,000	100.0%

these areas, and launched an advertising campaign to promote the less developed counties.

Although neither the development board, nor any other development interest for that matter, can locate industry in any preconceived area, some effect can be achieved just by making industry aware of the opportunities that exist. The development board adopted its "spread the opportunities" strategy in the early 1970's, and the results have been significant. Between 1960 and 1970, a total of 23 of the state's 46 counties experienced population declines. During the following 10-year period only 1 county had a population loss. Even more dramatic is the fact that 35 counties had a net in-migration of people between 1970 and 1980, compared to only 6 between 1960 and 1970. The reversal of the migration pattern points toward more economic opportunities, an especially dramatic trend for rural counties. While the migrants may compete for jobs with persons already here, they also often bring skills that complement or encourage industrial development.

The problems of rural counties are by no means solved. They still have the lowest income levels, the highest unemployment, and some of the state's worst living conditions. However, rural counties are the site for about half of the new plants that locate each year in the state, and as their industrial bases grow, service companies and support industry will follow. It will take time, but, hopefully, positive steps to improve job opportunities ultimately will afford these areas better housing, education, and health services, and an improved welfare in general.

IN THE NEXT DECADE

South Carolina's past will have a significant influence on its future. Changes in the textile industry are sure to result in fewer jobs. Modern day looms, for example, produce fabrics four times faster than the traditional shuttle looms. They also operate at an efficiency level of 95 percent or better. In some mills, the need for continuous inspection to insure quality control has been completely eliminated because the new weaving looms are so efficient they produce virtually flawless materials.

In 1970, textiles employed 44 percent of all manufacturing workers in the state. Today, they employ about 33 percent. Employment projections indicate a continuing decline for at least the next two or three years. This trend is not only true for textiles but also for other labor intensive and less technologically advanced industries. As a matter of fact, pessimistic futurists speculate that the economy of the nation may well experience jobless growth for the remainder of this century. They speculate that in order for United States' industry to compete in world markets, productivity must increase. According to those persons, the United States' productivity is low because industry operates with outdated technology. They say improving technology will result in fewer jobs. The fabrication, installation, operation, and maintenance of newer, more advanced machinery will result in new jobs, but too few to represent a significant net gain. Growth among service industries is expected to

TABLE 6. Manufacturing Employment (Percentage of Total)

Industry	1960	1980
Textiles	54%	35%
Apparel	13	12
Chemicals	5	8
Metalworking	6	22
All other manufacturing	22	23

Source: South Carolina Employment Security Commission, **Covered Employment and Wages in South Carolina 1960 and 1980.**

take up some of the slack, but they predict not enough to result in real growth.

Developing technologies of the remainder of this century will result in occupations that carry some unfamiliar titles. Additional technical skills will be required in energy, production and management, housing rehabilitation, hazardous waste management, new materials utilization, and genetic engineering. The use of industrial lasers; the design, production, installation, and maintenance of industrial robots; holographics; and bionic electronics are all relatively new occupations with future growth potential. Some of those skills will be used in retooled existing plants; others, in plants not yet built or even conceived. Who foresaw only a generation ago the impact of computers, microelectronics, lasers, or robots?

What will South Carolina's role be in these new developments? Can the state capitalize on these futuristic opportunities for new, better paying jobs? The answers to these questions obviously rest in the state's ability to provide workers with the skills necessary to fill such occupations, most of which will be more technical in nature than many of the blue-collar jobs of today. Most of these "light blue-collar" jobs will require one or two years of specialized training, and some will require at least a four-year degree.

A major step in the right direction has already been taken with the establishment of special resource centers on several of the state's technical education campuses. The state's universities also are installing new engineering programs and offering better continuing education opportunities to help existing engineers keep pace with these rapidly changing technologies. All of these efforts are an important investment in the state's future. The new TEC program, dubbed "Design for the Eighties," will emphasize advanced training in occupations of the future. These special resource centers are gearing up to offer instructional programs in robotic technology, microelectronics, computer applications, water quality, advanced machine tool operations, and advanced office occupations.

A recent survey by **Fortune** magazine asked leading corporate executives what would be important determinants in locating manufacturing plants in the next five years. There was a noticeable shift in their consideration for skilled and unskilled workers from an earlier survey. In 1976, respondents who had actually located a new plant within the previous five years indicated that the availability of unskilled and semiskilled workers was more important than the availability of skilled workers. However, in a 1981 survey, the response was just the opposite. Even more dramatic was the shift in their considerations for future plant locations. The 1980 survey showed that 21 percent of the respondents felt the availability of skilled workers would be an important consideration in the location of a plant during the next five years, compared to 13 percent in 1976. In 1981, it was the fifth most important of 26 factors. In 1976, it ranked twelfth. Conversely, the availability of unskilled and semiskilled workers dropped from fourth to seventh between 1976 and 1981.

Investment per new job in manufacturing has been rising at a steady pace for the last decade. This indicates a rising cost of machinery, equipment, construction, and land on the one hand, and more capital intensive manufacturing operations, as opposed to labor intensive operations, on the other. South Carolina's push, and that of most other states, is for better paying jobs. Better paying jobs generally demand higher skill levels. More highly skilled jobs are often associated with higher technology industries. Higher technology industries require less labor because they are more automated. Therein lies the dilemma. Is it possible to have a development program that concentrates sufficiently on high technology, high paying, but fewer, jobs, and still generates sufficient new opportunities to satisfy the growing labor market of the state? And — how about replacement jobs for those lost to modernization?

The answer in South Carolina, at least in part, has been job growth in nonmanufacturing sectors. Between 1978 and 1980, manufacturing employment increased by 19 percent while total employment grew by 28 percent (See Table 7.) Retail and wholesale trade, and government and services recorded the most growth. Employment trends in the state generally have followed national trends. That is, agricultural employment has remained about constant or declined in absolute and relative terms. Manufacturing employment has grown in absolute numbers but decreased relative to its share of total employment. Despite the fact that manufacturing employment in the state has steadily declined relative to total employment, however, South Carolina still maintains the second highest level of manufacturing employment to total employment in the nation. There is little doubt that South Carolina's future growth will depend on the ability of the state's labor force to provide workers equipped with the new skills that will be demanded by business and industry using technologies now in their infancy or not yet developed.

TABLE 7. Civilian Employment Trends 1970-'80

Category	United States			South Carolina		
	1970 (000)	1980 (000)	Percentage Change	1970 (000)	1980 (000)	Percentage Change
Manufacturing	19,367	20,300	4.8%	329.5	392.3	19.1%
Nonmanufacturing						
Construction	3,588	4,399	22.6	64.6	73.0	13.0
Transportation and Utilities	4,515	5,143	13.9	43.8	53.5	22.1
Wholesale and Retail Trade	15,040	20,386	35.5	152.8	223.9	46.5
Finance, Insurance, and Real Estate	3,645	5,168	41.8	30.4	47.5	56.3
Services	11,548	17,901	55.0	210.4	159.9	76.0
Mining	623	1,020	63.7	1.5	—	—
Government	12,554	16,249	29.4	35.7	237.3	*
Total Nonagricultural Employment	70,880	90,564	27.8	927.1	1,187.4	28.1

Source: U.S., Department of Labor, **Employment and Earnings** statistics; and South Carolina Employment Security Commission.

*The categories of government employment for 1970 and 1980 are not comparable.

GROWTH OPPORTUNITIES

The State Development Board maintains a constant vigil over the nation's industrial and business community to identify growth opportunities for the state. Such opportunities often are identified and targeted as a result of new technology developments, shifts in markets, or changing labor needs. Identifying and targeting industries and firms that have a need for new manufacturing facilities is basic to this effort. Growth industries and other industries with a presently less than "market demand" production capacity offer the most immediate potential. There are a number of government and private data sources that specialize in projecting industrial growth. These sources provide valuable information on the fastest growing industries.

Technological advances that would necessitate new production facilities are also a good source of potential new industries for South Carolina. These industries and representative firms are not as easy to identify as growth industries, but trade journals, general circulation publications, and street conversation provide leads to these on-the-move firms. Quite often the technologically advancing industries are the growth industries. A case in point is microelectronics. Generally, growth firms in this industry are the ones on the leading edge of new technologies.

Among the industries targeted by the State Development Board for their development potential are robotics, graphite fibers, electronics, machine tool design and production, plastics, pulp and paper, pharmaceuticals, medical supplies and instruments, and electrical machinery and instrumentation. These industry groups already have contributed noticeably to South Carolina's changing industrial base, and each has a significant growth potential.

In addition to manufacturing, South Carolina's industrial development will be influenced by corporate and regional offices, leisure industries, distribution, and research and development. Although not totally unlike manufacturing, these industries have somewhat different requirements. For example, air transportation is essential to corporate office locations. Distribution is transportation and market oriented, and research and development is prone to locate in areas where major universities and private industry have created a climate of advanced studies and product innovation.

Such an environment and image do not grow overnight. It took South Carolina the better part of a decade to build its image and reputation as a good place to manufacture. The state is just now realizing the growth benefits of second generation industries to service and supply much of the development of the 1960's and 1970's. Likewise, it will take persistence and take time to accomplish significant results in those areas of nonmanufacturing development.

CONCLUSIONS

These better conditions can be attributed, at least in part, to the fact that South Carolina has

maintained an aggressive and effective industrial development program for the last 20 or so years. Economic development is a complex matter and one not easily defined. Measures of achievement or nonachievement are also difficult to define. Standards used to measure national growth often are unavailable or inapplicable to a state. Most acceptable standards for measuring growth usually are dated and are not indicative of current conditions. Therefore, it is difficult to tell where the state is at any given time or how much progress has actually been made. A recession, such as we are presently experiencing, can wipe out the apparent statistical progress of a decade.

Growth, development, progress, and a better way of life have different meanings for different people. However, most will agree that life is better in South Carolina now than 20 years ago. Housing has improved, and health services are better and available to more people. General education has seen dramatic improvements. Most people in the state are better equipped to hold a job. Significant, too, is the fact that the state's development program has provided a culturally broadening experience for most citizens. South Carolina has been able to share its heritage and rich culture with the world. At the same time, new industries, both from this country and abroad, have brought influences to South Carolina that would not have been realized otherwise.

Changes in the next 20 years are predicted to be as traumatic as the agricultural shift of the past 50 years. Scientists say technological changes in the next 20 years will be greater than all those realized so far this century. In light of such predictions it is essential that the state maintain its development efforts if its economy is to survive intact and keep up with the rest of the world. Although much progress has been made in recent years, the state is still below average in many economic indicators. The progress made has not been sufficient to justify complacency. The state has set parity with the rest of the nation as its economic goal. This will be no small task. In 1960, the average income in South Carolina was 63.4 percent of the national average. In 1981, it stood at 76.5 percent. At that rate of progress, and all things being equal, South Carolina's income level will be at about 88 percent of the national average by the year 2000. Based on just this superficial evidence, it is clear that if the state is to achieve "average" by the turn of the century, it will have to double its rate of progress. Obviously, that means more effort, not less, if the state is to be successful in providing a better way of life for its citizens and improving their general welfare. It also means a cooperative and concerted effort on the part of all who influence South Carolina's development program, and the realization that economic development is an investment in the future; the only way out of the endless circle of poverty.

Industrial Development at the Community and County Level

By P. Malcolm Smurthwaite

The legislation that created the South Carolina State Development Board set forth the fundamental purpose of the organization: ". . . to establish a statewide planning and economic development program to stimulate economic activity and develop the potentialities of the state." During the 1950's and into the decade of the 1960's, the major emphasis of the board was on jobs. The economic circumstances of those years dictated that the state's leaders find jobs for the large number of South Carolinians who could no longer expect to find work on mechanized farms.

The process of locating the best situation for a new plant was relatively simple then. The State Development Board, the Governor's Office, and the local delegation to the General Assembly worked closely with members of the private sector (electric utilities, railroads, and construction firms). This group was able to attract solid companies to the state and to work out the arrangements needed to satisfy the prospects' requirements. The goal was to put as many people as possible to work.

As the transition was made from an agricultural base to a more industrialized economy, it became both desirable and feasible to modify this goal and to seek a more diverse industrial base, as well as more jobs. The Technical Education Program was established in the early 1960's to reinforce the manpower skills required to attract a variety of industrial operations. Diversity became a reality in

many sections of the state during the 1960's and the early 1970's. Accompanying the attraction of more diverse industry to South Carolina were the new enterprises that represented increased vertical integration of the industrial economy: steel mills, foundries, forging operations, and chemicals.

As these achievements moved the economy toward relatively full employment of South Carolina's productive labor force, the objective was gradually modified so we would become more attractive to capital intensive firms. Thus, the goals of the South Carolina State Development Board have progressed from more industrial jobs (labor intensive) to a more diverse industrial base to vertical integration of the industrial complex to capital intensive versus labor intensive pursuits.

THE GREAT TOWN PROGRAM

Unfortunately, all of these achievements have not been attained in every section of the state. Figure 1 shows the wide range of per capita income in the various counties. The South Carolina State Development Board's Legislative Charter calls for a ". . . state-wide program . . ." of economic development, implying a responsibility for a geographically balanced growth.

In the mid-1970's, the Directors of the South Carolina State Development Board expressed their determination to be more effective in promoting economic progress in all 46 counties and 261 municipalities of the state. It was obvious that extraordinary measures would be necessary to achieve a better distribution of economic growth in the small towns and rural areas. Industrial prospects have a list of requirements and services they must find available or accessible in their new locations. They usually perceive "small towns" as unlikely places to find such resources and the quality of life that will satisfy key managers and their families.

Quite often this is the case. On the other hand, **there are many industrial operations that are better suited to small towns and rural counties for their immediate needs as well as their long-range plans.** A very positive preparation and promotion program was called for to help the small towns become more appealing to industrial prospects. The Board of Directors identified as top priority the need to attain a better distribution of new industry when Bob Leak was named Executive Director in 1976. The Governor's Rural Economic Achievement Trophy (GREAT Town) Program was conceived as the foundation from which this objective could be realized. The resources and personnel required to bring industrial development capability to small regions of the state were so assigned. The emphasis on regional development has gained momentum during the succeeding six years.

The GREAT Town Program was unveiled promptly after Bob Leak assumed the post of Executive Director of the South Carolina State Development Board. Its goal and purposes are outlined below.

Goal

To improve the economy of rural towns throughout South Carolina and more evenly distribute industrial activity and career opportunities for our people.

Purposes

To improve the preparedness of the leadership of the state's smaller communities and their ability to promote successfully the economic development of their towns.

To provide public recognition of the communities that have made this effort to be better prepared for economic development.

To provide the State Development Board (and other agents to economic development) an inventory of towns that are ready to deal effectively with industrial prospects.

To enhance the spirit of community in the towns of South Carolina through a broad involvement by the residents in the several elements of The GREAT Town Program.

The promises of benefits made by the South Carolina State Development Board include the following.

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FIGURE 1. 1980 Income Per Capita (United States, $9,521, and South Carolina, $7,292)

Each GREAT Town will be given prime consideration by industrial agents as they determine which towns to visit with a prospect.

The program will provide a structure to help the leadership of small communities prepare their towns for overall economic improvement.

A component of national advertising outreach will focus attention on the GREAT Towns.

The 251 communities under 15,000 population were targeted for this program on the assumption they needed special attention. Furthermore, the 10 cities over 15,000 population had sufficient economic and tax bases to mount their own programs. The industrial resources of the larger cities would be attractive enough to maintain their industrial development momentum.

The GREAT Town Program prescribes an organization that is essential to any effective development effort, large or small. In addition to a Nonprofit Development Corporation, there are five committees that work to achieve standards of preparation set forth in the GREAT Town Program.

A committee responsible for acquiring and organizing all the basic information an industrial prospect must have.

A committee to put together effective promotional materials: a Sales Brochure and a Slide/Tape Presentation that will display and discuss the features of the town.

The Site Committee to establish and maintain an inventory of competitive industrial sites.

A committee to establish a working rapport with the Existing Industries in that area. The purpose is to help existing industry grow and expand, enhance the appreciation of the community for those industries already pro-

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viding jobs and paying taxes, and promote the free (competitive) enterprise system.

A large committee to develop and implement a program to improve the appearance of the town.

When the work of these preparation committees has been completed, the State Development Board trains a local Resource Team (Sales Team) of four to six members. Their function is to assist the County Development Executive and the Industrial Representative from the State Development Board in presenting their community to industrial prospects in the most positive and informative manner.

When the local Resource Team has been trained, an Award Committee of five industrial development professionals from around the state visits the community, meets with these leaders, and determines whether that local development program is ready to deal effectively with industrial prospects. When the Award Committee recommends a community to become a GREAT Town, Governor Riley then presents a trophy to the leaders and citizens of that community symbolizing their achievement. GREAT Town signs are erected and from that day, serious consideration is given by the Industrial Agents to recommending the GREAT Town as they plan and coordinate visits of prospects. Extensive promotion of these towns is included in the national and international advertising program of the State Development Board.

Since the inception of The GREAT Town Program, approximately 70 communities have enrolled, of which 51 have completed the preparation phase and been awarded the trophy by the Governor. These towns are indicated on the outline

FIGURE 2. (GREAT) Town Program Trophy Winners

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map in Figure 2. The county seats in 29 rural counties are GREAT Towns, giving many of those counties an industrial development capability not previously available.

A total of 84 new plants have been announced in these small towns subsequent to their becoming GREAT Towns. These plant announcements involve 6,693 new jobs and $288,786,000 of new investment.

An important part of The GREAT Town Program is to nourish the manufacturing companies operating in and around the GREAT Towns by creating and maintaining local conditions vital to the prosperity and expansion of existing industry. Since the program began, there have been 505 announcements of plant expansions in the GREAT Towns that have resulted in 6,607 jobs, representing $1,374,032,000 of investments in facilities and equipment.

DEVELOPMENT AT THE COUNTY LEVEL

Coinciding with the new emphasis by the Development Board on industrial development in small towns and rural counties, the General Assembly passed Home Rule Legislation in the mid-1970's. Among other provisions, this act established the county council's responsibility for economic development. The creation and appointment of county development boards, appropriations for such activities, and the relative importance placed on economic development moved from the state legislative delegation to county councils.

Prior to Home Rule Legislation, industrial development at the local level was attended to by full-time professional development executives in 24 counties. There were 16 counties that did not have full-time development executives. They were Aiken, Barnwell, Calhoun, Chesterfield, Clarendon, Darlington, Dillon, Edgefield, Fairfield, Jasper, Lancaster, Lee, Marion, Marlboro, McCormick, and Saluda. There were 6 other counties where the development responsibilities were handled by people who had both chamber of commerce duties and development assignments. These included Bamberg, Cherokee, Greenwood, Kershaw, Laurens, and Union.

In August 1979, Chairman Max Heller created a 43-member committee of leaders in the public and private sectors to address the problems of economic development in rural counties. In order to establish a manageable project, six of the counties with the lowest economic vitality were chosen for this concerted effort. They were Clarendon, Jasper, Lee, Marlboro, McCormick, and Williamsburg.

Assigned to carry out the work of these seven major committees, made up of leadership from people concerned with governmental or private activities that impacted on rural development, were four members of the development staff. These committees were Leadership, Legislative, Industrial Buildings, Research, Education — Training, Existing Industry, and Agriculture.

The work of these committees has resulted in several special programs to deal with the fundamental shortcomings of the industrial development situation in the most severely depressed rural areas. Perhaps even more important, county development programs were either reinforced or established in these six counties and five of the six had added full-time development professionals to head up their county industrial development efforts.

In 1981, the State Development Board created the Rural Economic Development Division and assigned four industrial agents to concentrate on targeting industrial prospects for the rural counties throughout South Carolina. The staff also works with local development leaders in close cooperation with the Community Preparation Division in the development of location resources for future industrial development.

The Rural Economic Development Division provides special assistance to the six economically distressed counties listed above. The professional development staffs of these counties have been taken on industrial prospecting trips and have received financial assistance in printing and other promotional activities.

A special advertising program targeted toward industries for rural areas was initiated in November 1981. A toll free telephone line was installed to handle responses to these advertisements. To date, 590 responses have been handled by the division staff.

MOBILIZING SOUTH CAROLINA'S ECONOMIC DEVELOPMENT ALLIES

For regional economic development to succeed in the fierce competition for industrial jobs, it must be a well orchestrated program with all sections providing their unique resources.

Municipalities

Official town leadership and business and community leaders must be involved. The GREAT Town Program mobilizes the industrial development capability at the municipal level. The final sale is usually made here.

Counties

County council now have the overall responsibility for economic development, usually expressed through county development boards and, most effectively, when there is a full-time development executive. A county whose communities have enhanced their development appeal obviously reinforce the overall county program.

Councils of Governments

There are 10 Regional Planning Commissions or Councils of Governments in South Carolina that provide comprehensive planning for their several counties, assist in town administration, help municipal and county governments participate in federal programs that affect economic development and quality of life, and prepare information and promotional materials for their areas, counties, and/or towns.

State Development Board

The South Carolina State Development Board has state-wide responsibilities to promote, nationally and internationally, economic development for South Carolina. They also are to administer statewide programs that are a part of the economic development picture and establish a strong position in the industrial development market with corporate prospects, assisting them in exploring locations in the state.

The Ally Network

The Ally network is made up of utilities, railroads, construction companies, banks, consultants, and pertinent state agencies. These latter include TEC, DHEC, the Tax Commission, Vocational Education, the Public Service Authority, the Ports Authority, Water Resources, the Department of Transportation and Highways, and certain federal agencies.

A taxpayer may look at this list with horror, thinking that the tiers of tax-supported organizations listed above indicate duplication and wasted tax revenues. On the contrary! These are coordinated resources, all of which have a vital and unique part in the overall picture of economic development. Each group has responsibilities peculiar to its primary function and service area. In addition to the required physical attractions of fully serviced sites, productive manpower, and transportation access, the team approach to successful industrial development has been proven time and time again, both positively, where it abounds, and negatively, where it does not.

EFFECTIVENESS OF REGIONAL ECONOMIC DEVELOPMENT INITIATIVES

The definition of "success" in economic development varies according to each person's agenda. Some measures popular in the field include

availability of jobs for a growing labor market

per capita income — relative progress

per capita income — related to the national average increased revenues from property taxes and corporate income taxes

industrial career opportunities in small towns and rural counties

Before the current recession, the state as a whole was making modest progress in approaching the national per capita income.

Year	United States Per Capita Income	South Carolina Per Capita Income	South Carolina As Percentage of United States Per Capita Income
1960	$2,222	$1,397	62.2%
1965	2,785	1,908	68.5
1970	3,945	2,975	75.4
1975	5,845	4,533	77.6
1980	9,521	7,292	76.6

Similarly, the labor force was growing in both numbers and skills during the past decade and total personal income reflected this progress.

Year	Total Nonagricultural Employment (in thousands)	Total Personal Income (in millions of dollars)
1960	583	$ 3,336
1965	686	4,759
1970	842	7,730
1975	983	13,134
1980	1,187	22,807

The first 25 GREAT Towns announced 46 new plants with 4,300 jobs, representing an investment of $128,400,000 after they had been designated GREAT Towns. In a comparable period before becoming GREAT Towns, these same communities had realized only 14 new plants, 1,259 new jobs, and $19,600,000 in new investment. In a study made by Gary McLaren of the State Development Board, comparable progress was charter for 15 other communities with similar population bases in an effort to eliminate external factors caused by the economy. This comparison showed that the towns that had mobilized their community economic capability achieved a 368 percent higher increase in new investment and a 590 percent increase in new industrial jobs during the same periods. Such progress demonstrates the value of preparing for industrial development in small towns. Since a large portion of our counties can be

specified as "nonmetropolitan," comprehensive preparation on the community and county level is prerequisite to a better economic balance throughout the state.

Figure 1 illustrates the fact that economic development in various regions of the state continues to be largely unsolved. This disparity of per capita incomes causes the State Development Board to dedicate a considerable portion of its capability and capacity to the problem of a more balanced economy throughout the state. In 1980, Allendale had the lowest per capita income, $4,397, which was 50.8 percent of the highest per capita income, Greenville County, and only 60 percent of the state average.

The metropolitan areas of South Carolina have been able to develop the "critical mass" of industrial, business, and community infrastructure to keep their economic development process flowing. Not only are the metropolitan areas more attractive to multinational, United States based corporations, but also a similar critical mass for foreign-based ventures has been assembled in the upcountry with Spartanburg as the nucleus. Such processes become somewhat cumulative once that critical mass is in place. It appears that the towns and counties of Florence, Sumter, Greenwood, Aiken, Orangeburg, and Anderson are approaching this capability and will be in a very competitive position when the economy rebounds.

CONCLUSIONS

During the first year or two of recovery from this recession, the small towns and rural areas may severely lag the overall recovery until the labor markets and available factory buildings in the metropolitan areas are put back to work. The overall economic development picture is going to continue to be distorted as the phenomenom of "jobless growth" descends upon the Southeast. Actually, during the decade of the 1970's, the textile industry was in the throes of jobless growth as it struggled to improve productivity and its competitive position by mammoth investments in new equipment. Such modernization of production methods necessarily reduced the number of employees per unit of output but accomplished life-saving economies in costs and quality. South Carolina's next senior industry, paper and pulp, is experiencing large investments in process equipment that will ultimately reduce the number of people employed in this industry per unit output. Such is the nature of the industrial life cycle.

The consequences of these economic experiences intensify the pressure on the various members of the industrial development fraternity to establish a large number of new manufacturing enterprises throughout the rural areas of the state. The outlook for improving the distribution of industrial jobs in the rural counties of the state will be most difficult during the next 18-30 months. If South Carolina is to recover from this recession with a more balanced economy, the agencies and people responsible for its economic development will have to work in complete harmony to prepare and promote small towns and rural counties more effectively than neighboring Southeastern states.

An Approach to Industrial Development in Georgetown County, South Carolina

By Jack M. Kendree, Sr.

INTRODUCTION

The philosophy that the City is the People was espoused by Henry S. Churchill, one of the pioneers of contemporary planning in the United States. Whether we are concerning ourselves with a city, a county, or a state, the same philosophy holds true.

Industrial prospects create an image of the dynamics of a community as represented by the people to whom they are exposed in the community. The physical profile of a community is a static presentation at a given point in time. The prospect will see what he is shown or what he has targeted to see himself. A brochure, a slide presentation, or a project model are static as well.

The dynamics of a community are evidenced by the people. In industrial development the people acting on behalf of the community may have one opportunity to establish at least a willingness on the part of the prospect to continue an exploration of the community. This is the opportunity for those representatives to qualify the vitality of the

religious, educational, and other resources of the community in an introductory manner. The prospect will determine whether or not he will return for a second, more detailed, evaluation.

The City is the People, the County is the People, and the State is the People, especially in the conduct of industrial promotion. The Georgetown County program encourages the involvement of many people in its promotional effort, not only for the enlightenment of those people but also for a better understanding of the community and its objectives by the prospective industrialist.

INDUSTRIAL DEVELOPMENT INITIATIVES IN SOUTH CAROLINA

Industrial development in South Carolina is promoted at both state and local levels. State level representation includes the South Carolina State Development Board and the South Carolina State Ports Authority. These two agencies represent the best interests of the state in areas of economic enhancement. They do not, and this is often misunderstood by people involved in industrial development at the local level, serve as the development agent for a given city or county. They do serve in a support capacity and are available as a resource. Neither do they act on behalf of the community nor give the impression that they speak for the community unless it is in concert with the interests and actions of the community. This posture is quite proper.

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Don Welch, Executive Director of the South Carolina State Ports Authority, is charged with the responsibility of representing the state of South Carolina in port related national and international trade and commerce and, therefore, in those industrial activities that enhance the economic posture of the ports of our state. Similarly, Bob Leak, Executive Director of the South Carolina State Development Board, is charged with the responsibility of representing the best interests of the state in enhancing basic employment opportunities through the creation or attraction of new industries throughout South Carolina. Fortunately, both men are exceedingly competent in the performance of their respective assignments.

Within the state, the resources of the community, often brought together at the county level, are represented by a development commission, a chamber of commerce, or a body that combines those interests. The local entity then works in concert with the state agencies. The primary agency for state-wide industrial promotion is the State Development Board. The primary agency for port related industrial activity is the State Ports Authority. To be effective in the implementation of industrial development at the local level it becomes prudent to make maximum use of the resources available in industrial development through these two organizations.

THE GEORGETOWN COUNTY PROGRAM

Since the Community is the People, and every community has its own personality, the collection of people assembled for the purpose of industrial promotion will determine whether or not the best efforts are being made on behalf of that community. There is no magic combination of factors that will work in every instance. The best effort at any given point in time will be that which a particular group of people choose to effect. In the case of Georgetown County, the development program represents broad community involvement and reflects that the County is the People.

ORGANIZATIONAL STRUCTURE

Pursuant to, and in compliance with, Section 4-9-30, Code of Laws of South Carolina for 1976, as amended, the County Commission created the Georgetown County Development Commission in January 1980. This commission was created for the purpose of promoting and encouraging the industrial development of Georgetown County. It envisions its objectives as being those of increasing employment opportunity and enhancing the tax base of the county.

The Port of Georgetown is the proposed site of the new dry dock and ship repair facility being negotiated between the South Carolina State Ports Authority and Braswell Shipyards, Inc.

The Georgetown County Development Commission has full power to acquire by gift, purchase, or trade such property, real or personal, considered necessary pursuant to the purpose of the commission. It also has the obligation to conduct its affairs in a manner consistent with the best interests of the county.

In Georgetown County the enabling ordinance calls for 10 members to be appointed by County Council. In addition, the Chairman of County Council, mayors of incorporated municipalities of the county, and any member of the State Development Board who is a resident of the county and any member of the State Ports Authority who is a resident of the county, shall be members ex officio, and are invited to attend, and participate in, all full meetings without holding office or voting.

Early in its existence, the Georgetown County Development Commission determined that liaison opportunities were being overlooked, unintentionally, and asked the council to amend the ordinance for the purpose of including as ex officio members of the commission those residents of the county who held positions on the boards of other state agencies, such as South Carolina Water Resources, South Carolina Coastal Council, and Santee-Cooper, as well as resident state Senators and Representatives. As a result, the basic commission membership of 10 was enhanced by an ex officio body of an additional 10 people. The lines of communication were thus established between the county and the state.

THE COMMITTEE APPROACH

To insure that matters brought to the full commission membership are ready for public discussion, the commission created an Executive Committee consisting of the Chairman, the Secretary, and the Treasurer of the commission. This body has no authority at all but is an advisory group on matters to be brought before the commission. The commission acknowledges the Freedom of Information Act and is therefore in an extremely delicate position when prospects must talk to development representatives in confidence. The balance between confidentiality and public information is effected by the Executive Director and the Executive Committee. When a prospect notifies the commission that personal or private negotiations have reached the point where his anticipated actions can become public, the commission then initiates the public discussion relative to a given proposal. **To be emphasized, therefore, is the absolute necessity of evidencing to a prospect that discussions relative to his interests will remain confidential until the**

prospect determines that public awareness is in order.

Usually, the Executive Director is the contact for the discussion of initial expressions of interest, but the appointment, by County Council, of community leaders from a variety of business interests affords options to prospects for initial contacts. The appointment of members to the commission from different disciplines and backgrounds strengthens the conduct of commission affairs since different viewpoints can be expressed on individual proposals.

The relationship between the Executive Director, the Executive Committee, and the full commission membership, therefore, is one that must be flexible enough to respond to the expressed level of confidentiality and nature of interest requested by the prospect. However, the prospect is entitled to as thorough a response to his inquiries as the community can provide. To strengthen the ability of the development commission to offer in-depth responses and to provide a greater variety of observations on more specific activities the commission has created, to date, four working committees, the members of which are appointed by the commission.

The Buildings and Sites Committee

Without an inventory, the merchant has nothing to sell. Without buildings and sites, the development commission has nothing to offer. Such buildings and sites can be in the existing inventory or planned to the point they are available under certain conditions. The Buildings and Sites Committee of the Georgetown County Development Commission includes members from the commission (as do all of the committees), but the bulk of its membership comes from county residents who bring a variety of expertise to the group.

Buildings and Sites Committee members can include realtors, personnel associated with area utility companies, builders, and port development interests. This committee, as others, can have ex officio members from the tax offices and planning agencies and other offices where representation would strengthen the discussion of a proposal. Plans for future development proposals would benefit from a review by a buildings and sites committee. This is especially true of major public projects such as county sponsored industrial parks.

One observation should be made concerning the qualifications of those being considered for appointment to a development commission or a working committee of that commission. The basic criterion should be the individual's ability to act in an unbiased manner in representing the best interests of the community, rather than a concern over that person's position in the business community. This may seem a difficult assignment, but it is not impossible. If a County Council were to disqualify from consideration special interest groups such as realtors, lawyers, owners of land, builders, etc., the county would soon have disqualified from appointment the best expertise the community may possess. At any time, a responsible participant would withdraw from further consideration of a given proposal if a true conflict of interest were to arise.

The Existing Industry Committee

The South Carolina State Development Board has determined that in excess of 50 percent of all new jobs are created through the expansion of existing industry. Existing industry is an asset to be preserved. All too often, it is ignored. Today's economy has produced many hardship cases in both small and large industries. The development commission may not be able to resolve a problem, but if industry in a community has confidence in the commission, at least they have a good listener. The role of the development commission can include an appreciation of, and understanding for, existing companies.

To focus on this facet of the local economy, the Georgetown County Development Commission created an Existing Industry Committee. The objectives of this committee are (1) to establish a liaison with existing industry, (2) to provide assistance if requested, (3) to encourage existing industry to identify other support industries the development commission might bring into the community, and (4) to identify for existing industry those resources that industry might utilize in an expansion program.

The Existing Industry Committee of the Georgetown County Development Commission has initiated a public awareness program and acknowledged the importance of existing industry in the Georgetown community. In cooperation with the Rotary Club, they have created an existing Industry Week. They have included industrial leaders in the community in policy level discussions on development proposals or concepts that could impact on the entire community. They have also conducted meetings with industrialists and development commission members for the purpose of sharing information on changing influences in the community. Most important, however, has been their simple acknowledgment that existing industry is

appreciated and that the development commission is an available resource.

The Industrial Marketing Committee

An industrial prospect will have screened a variety of alternatives before initiating a site visit. That prospect will also have identified specific information he would like to assemble relative to his particular interests. In other words, the **prospect** will be prepared for his visit, but will the **community?**

In an attempt to effect maximum preparedness on the part of Georgetown County, the Georgetown County Development Commission created the Industrial Marketing Committee. This is the largest committee the commission has, for a variety of reasons. One segment of the membership includes representatives from the School District, Horry-Georgetown Technical College, the Georgetown Community Hospital, and the Chamber of Commerce. These members can best respond to specific questions from a prospect on community resources. (Utility, zoning, and tax information is available from the Buildings and Sites Committee. Each committee is considered a resource for all other committees.)

Another segment of the membership of the Industrial Marketing Committee includes bankers, the media, employment sources, and technical training facilities. An additional category of membership includes those residents of Georgetown County engaged in national or international trade who can (1) carry the Georgetown message with them on their travels and (2) bring leads back to the commission for prospect identification and pursuit. This could be one of the least expensive means of prospect identification industrial marketing people could use.

This last category of membership in the Industrial Marketing Committee is one that might best be referred to as the Industrial Development Ambassadors of Georgetown County. It is this segment who represent the interests of Georgetown in other parts of the country or world.

One objective of the committee is to insure that the residents of Georgetown County are aware of the activities and interests of their development commission and the potential the county may have to offer a variety of interests. Thus, at any time and any place, if a contact with a potential prospect is made, the Georgetown County Ambassa-

The Georgetown mill of International Paper Company is now under a total reconfiguration program estimated to cost more than $500,000,000 over the next three years. (Photo by Henry DeWolf, Rochester, NY.)

dor is prepared to introduce the prospect to Georgetown County.

In summary, the Industrial Marketing Committee has the task of presenting the community in such a way that responsible answers are provided to prospects' questions, the prospect is afforded an opportunity to explore all facets of the Georgetown community, and resources available to that prospect are brought to his attention.

The Aquaculture-Mariculture Committee

Perhaps the most unusual development commission committee to be created is the Aquaculture-Mariculture Committee. The Georgetown County Development Commission, in assessing the resources of its county, identified aquaculture as a potential development program that should be evaluated. Early in the 1970's, the South Carolina State Development Board initiated an aquaculture exploration program, but, for a variety of reasons, no major implementation effort developed. The probability is that aquaculture for South Carolina at that time was premature.

During the last 10 years, however, aquaculture on an international basis has begun to thrive. In the United States, economically successful ventures have developed in Arkansas, Mississippi, Louisiana, and certain parts of other states. In addition, various educational institutions, foundations, and agencies in South Carolina have been continuing scientific studies and initiating demonstration projects on the production of a variety of species. Not to be overlooked are the efforts that have been engaged in by many private individuals throughout the state in the production of various species.

The conclusion of the development commission was that with the abundance of both fresh water and salt water in Georgetown County and the extensive scientific resources in position in South Carolina, aquaculture for Georgetown County was worthy of reassessment. As a result, the commission created the Aquaculture-Mariculture Committee in the spring of 1981 for the purpose of evaluating this potential in Georgetown County and inviting the available expertise throughout the state to assist in exploring the feasibility of such a program emerging in the 1980's.

The Aquaculture-Mariculture Committee and the Georgetown County Development Commission have created a public awareness program, and solicited and received technical and scientific assistance and support from experts engaged in aquaculture and mariculture at various educational, institutional, and agency resources throughout the state. The commission is not yet ready to conclude that extensive aquaculture is economically feasible for private enterprise in Georgetown County, but preliminary studies do suggest that such feasibility may be imminent and that the county should be ready to assist in implementation.

SUMMARY OBSERVATIONS

Nothing in the above discussion is intended to imply that Georgetown County has found the solution to high unemployment, the secret of attracting a desired industry, or the proper balance between development and the preservation of natural amenities. We have, however, learned that there are extensive resources available throughout the state for those development commissions that can identify both the need for such resources and their appropriate applications.

Georgetown County will continue to grow. In its advisory capacity to County Council, the Georgetown County Development Commission has attempted to equip itself to assist in guiding future development within that county. Collaborative efforts, with the County Planning Commission, County Council, and other agencies or commissions involved in planning and development, are mandatory.

The Employer and Employment Laws

By James J. Baldwin, LL.D.

The Employer and Employment Laws is a regular feature. Suggestions and inquiries by readers are invited.

NLRB GIVES NONUNION EMPLOYEES THE RIGHT TO "REPRESENTATION" DURING INTERVIEWS WITH EMPLOYER

The National Labor Relations Board[1] in a highly controversial move, has ruled that nonunion

[1]Hereinafter referred to as the Board.

employers must provide their employees with "representatives" during certain types of meetings and conferences. In its **Materials Research Corp.** decision of July 20, 1982,[2] the Board issued a far-reaching ruling which is expected to have a definite effect on employee relations in nonunion plants. A review of the decisions prior to **Materials Research Corp.** that generally involved unionized employers indicates how this right to representation will now be applied to nonunion employers.

In 1975, the Supreme Court decided **NLRB v. J. Weingarten, Inc.,**[3] approving a Board theory giving unionized employees a right to union representation during certain investigatory meetings held by employers. This theory became known as the **Weingarten** rule. In **Weingarten,** the unionized employer investigated reports that one of its employees was stealing money, and the employer's manager called the suspected employee into his office and questioned her. The employee asked the manager several times during the meeting to call her union shop steward. The manager denied all these requests. Further investigation revealed the employee had not stolen any money, and no disciplinary action was taken against her. However, unfair labor practice charges were filed alleging that the denial of union representation at the meeting was unlawful under the National Labor Relations Act,[4] and the Board found the employer's conduct unlawful.

The Court agreed with the Board's finding that an employee has a statutory right "to refuse to submit without union representation to an interview which he reasonably fears may result in his discipline."[5] The Court outlined the "contours and limits"[6] of this right.

1. The right arises only in situations where the employee requests representation.
2. The right is limited to situations where the employee reasonably believes the investigation will result in disciplinary action and does not apply to run-of-the-mill shop-floor conversations.
3. The employer can give the employee the choice between having an interview unaccompanied by a representative and having no interview at all.
4. The employer has no duty to bargain with any union representative who may be permitted to attend.

One important aspect of the **Weingarten** rule that has been the subject of much litigation is the type of meeting to which it applies. The Supreme Court stated that the rule does not apply except in situations where the employee reasonably fears the investigation will result in disciplinary action. Subsequent cases have applied **Weingarten** to virtually any situation where the employer asks the employee about conduct that might lead to discipline regardless of whether discipline was intended or in fact resulted.[7] However, where the supervisor or management official involved has assured the employee that no disciplinary action is possible, the Board generally has not applied **Weingarten.**[8] Other cases have found that it was clear from the nature of the meeting itself[9] that discipline was not possible. The bottom line seems to be that the Board will apply **Weingarten** if the interview could lead to disciplinary action of any sort.

Another important aspect of the **Weingarten** doctrine is exactly what constitutes an adequate request for representation in order for **Weingarten** to apply. The cases indicate that anyone other than the employee himself, such as the union steward, generally cannot make the employee's request for him.[10] It also is clear that once an employee makes the request, he need not repeat it and does not waive his right to representation by simply proceeding with the interview.[11] An employee's request must nevertheless be reasonable. For example, the nonunion employee has no right to

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[2] 262 NLRB No. 122 (July 20, 1982).

[3] 420 U.S. 251 (1975).

[4] 29 U.S.C. § 151, **et seq.,** hereinafter referred to as the NLRA.

[5] 420 U.S. at 257.

[6] 420 U.S. at 256-260.

[7] **Lennox Industries v. NLRB,** 637 F.2d 340 (5th Cir. 1981).

[8] E.g., **Spartan Stores v. NLRB,** 628 F.2d 953 (6th Cir. 1980) (meeting concerning employee's attitude problems); **Amoco Chemicals Corp.,** 237 NLRB 395 (1978) (absence counseling session).

[9] **U.S. Postal Service,** 252 NLRB 61 (1980) (medical examination).

[10] **Appalachian Power Co.,** 253 NLRB 931 (1980).

[11] **Lennox Industries v. NLRB, supra,** n.7.

representation by an outside union official and must be content with representation by a fellow employee.[12] Even so, the employer should give the employee his choice of a representative where reasonable.[13]

One frequent problem confronted by employers is the active role representatives occasionally attempt to play in the meetings. For example, a representative may try to answer the questions for the employee or demand to counsel with the employee prior to the interview. While the employer may not insist that a representative remain silent, he need not allow the representative to turn the interview into an adversarial contest.[14] However, the Board has held that the employee should be informed of the nature of the interview in advance and be allowed to consult with the representative prior to the interview if he so desires.[15]

Another aspect of the **Weingarten** doctrine with which employers should be familiar is that it does not apply at meetings "held solely for the purpose of informing the employee of, and acting upon, a previously made disciplinary decision."[16] However, if an employer asks any questions or attempts to gain an admission from the employee, **Weingarten** rights will attach. The employer desirous of implementing discipline and avoiding **Weingarten** should complete any warning or discharge forms prior to the interview and administer the discipline at the outset. The discipline can then be explained to the employee and the employer can answer the employee's questions. The employer should strictly avoid the solicitation of facts or evidence that may further support the discipline.

Employers should also be familiar with the possible remedies for a **Weingarten** violation. These remedies can include a cease and desist order, a requirement that a notice be posted informing the employees that the employer will not violate their rights, reinstatement and backpay for affected employees, and the expunging of disciplinary records. Generally, employers are required to post a notice and ordered to cease and desist further such conduct in any case in which they were found to have violated the **Weingarten** rule. If an employee is discharged in an interview that violates **Weingarten,** reinstatement and backpay will be ordered unless the employer can prove that the decision to discipline was not based on information obtained at the interview.[17] Even though this rule might seem fair on its face, it can lead to inequitable results. For example, in **Montgomery Ward & Co.,**[18] the employer gained an admission from an employee it subsequently discharged that he had stolen some merchandise, but the employer denied the employee's request for representation. Even though the employee again admitted the theft at the Board hearing, the Board ordered that the employee be reinstated with backpay because the employer could not prove that it had not relied on the admission gained at that unlawful interview. Fortunately, the courts have generally refused to enforce Board orders for reinstatement in cases such as this when the employee was discharged for "good cause."[19]

In summary, employers should be aware of the general rules listed below.

1. **Weingarten** applies to both union and nonunion employees.
2. The right does not apply to meetings unless the employee reasonably fears disciplinary action may result. Thus, routine shop-floor conferences (not involving employee discipline) do not trigger an employee's right to a representative. A few examples of the types of meetings or conferences between supervisors and employees in which no right to representation exist are
   a. meetings to explain new work procedures,
   b. conferences concerning new methods of operating equipment,
   c. discussions concerning safety,
   d. conferences to convey work instructions, and
   e. meetings to outline employee work duties.
3. The employee need not be informed of the right to representation and must request it for the right to attach.
4. The employee is entitled to know the subject matter of the interview in advance

[12] **Anchortank, Inc. v. NLRB,** 618 F. 2d 1153 (5th Cir. 1980).

[13] **Illinois Bell Tel. Co.,** 251 NLRB 932 (1980) (employee entitled to representation by another employee instead of steward).

[14] **Texaco, Inc.,** 251 NLRB 663 (1980), **enforced,** 659 F.2d 124 (9th Cir. 1981).

[15] **Pacific Telephone and Telegraph Co.,** 262 NLRB No. 127 (July 20, 1982); **Climax Molybdenum Co.,** 227 NLRB 1189 (1977), **enforcement denied,** 584 F.2d 360 (10th Cir. 1978).

[16] **Baton Rouge Water Works Co.,** 246 NLRB 995 (1979).

[17] **Kraft Foods, Inc.,** 251 NLRB 598 (1980).

[18] 254 NLRB 826 (1981), **enforcement denied,** 664 F.2d 1095 (8th Cir. 1981).

[19] E.g., **General Motors Corp. v. NLRB,** 674 F.2d 576 (6th Cir. 1982).

and to consult with the representative in advance, if he so desires.

5. A nonunion employee is not entitled to a nonemployee representative and must be satisfied with an employee representative.
6. The right does not apply to a meeting called strictly to administer previously determined discipline.
7. The employer should not require the representative to sit silent but also should not allow the representative to dominate the meeting.
8. When confronted with a demand for representation, the employer has several options. The employer may grant the request, or it may give the employee the option of dispensing with the interview (and the opportunity to present his position) or continuing the interview without representation.

Nonunion employers should also be aware that requests by employees for "witnesses" or "a representative" can often be the first sign of union activity. Union organizing tactics now include advising employees to ask for representation in all disciplinary-type meetings with the employer.

Since the NLRB's recent action can now result in unfair labor practice charges being filed against nonunion employers, front-line supervisors and managers need to be advised of the manner in which they should deal with employee requests for representation during meetings or interviews. Unless managers and supervisors are prepared to deal properly with such employee requests, legal problems can result.

Bottom Lines

By James B. Edwards, Ph.D., C.P.A., C.M.A., C.I.A., C.D.P.

Bottom Lines is a regular feature that brings attention to practical business taxes and accounting. Suggestions and inquiries by readers are invited.

FEDERAL TAX LINES

August 19, 1982, the 97th Congress passed the Tax Equity and Fiscal Responsibility Act of 1982. September 3, 1982, President Reagan signed it into action.

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This act combines tax increases with tax reform provisions that will raise an estimated $98.3 billion in revenue over the next three years. For the three fiscal years affected, total individual tax increases are estimated at about $6.5 billion, business tax increases at approximately $35.2 billion, increased compliance with existing laws for both individual and business taxpayers at $27.8 billion, excise and employment tax increases at $20.1 billion, and other changes for a total of $8.7 billion. This increase will offset about one-fourth of the tax reductions adopted last year in the Economic Recovery Tax Act of 1981 (ERTA). However, this new act does not affect in any way the reductions in the individual tax rates provided by ERTA. Thus, the final 10 percent tax reductions for individuals, as provided by ERTA, will go into effect on July 1, 1983, as scheduled.

As described in the Senate Finance Committee Report, the act has four principal objectives: (1) to raise revenues to narrow anticipated budget deficits, (2) to ensure that both individual and business taxpayers pay their fair share of the total tax burden, (3) to reduce distortions in economic

BUSINESS AFFILIATES

The Business Affiliates program of The USC-Business Partnership Foundation, chartered in 1977, is designed to attract business investment and participation in the programs of the College of Business Administration. Advantageous to both, this program benefits the business community through better prepared graduates and higher levels of professionalism of employees who participate in the graduate or continuing education programs, and the college through a new sense of relevancy and realism from corporate and business involvement.

Membership funds supplement university appropriations and provide for faculty development, student aid, and program and research support, as well as development of a professional business library within the college. It is the foundation's hope that this will prove to be an ever-expanding partnership program for the college and the business community.

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First Federal Savings & Loan Assoc. of Camden
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First National Bank in Orangeburg
First National Bank of S.C.
First Palmetto Bank & Trust
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Standard Life
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behavior resulting from the present tax system, and (4) to charge groups benefiting from specific government programs with the costs of those programs. The act will affect such diverse areas as pension plans, corporate mergers and acquisitions, the completed-contract method of accounting and life insurance companies. The act will also cause many individuals and corporations to incur significant costs related to new withholding and reporting requirements, and will impose new penalties on those who fail to comply. This move represents an attempt to increase taxpayer compliance and reduce the amount of unreported taxable income — the so-called "underground economy."

This month's column is designed to alert you to **some** of the highlights of the act. You should consider consulting with your tax adviser for tax planning suggestions. **Because of the large number of new provisions contained in the act, it is impossible to summarize them all in this issue.**

INDIVIDUAL TAXPAYERS

Changes primarily affecting **individual taxpayers** are discussed in the sections immediately following.

Line One

For years beginning after December 31, 1982, "alternative minimum taxable income" (AMTI) will be computed by beginning with adjusted gross income (AGI) and

1. increasing AGI by the amount of certain tax preference items and by the amount of any regular tax net operating loss,
2. decreasing AGI for certain "alternative tax itemized deductions" and for a recomputed "alternative tax net operating loss,"* and
3. reducing AGI further by an allowed exemption amount ($40,000 for joint returns, $30,000 for single returns, and $20,000 for married, filing separate returns).
4. The alternative minimum tax is then computed by applying a 20 percent tax rate to the resulting AMTI base.
5. Individuals will pay the greater of the resulting alternative minimum tax (reduced only by foreign tax credits) or the regular tax (as reduced by all allowable credits such as investment tax credit and foreign tax credit).

The preference items under existing law will continue, except for adjusted itemized deductions, rapid amortization of railroad rolling stock, and amortization of child care facilities. There are also new preference items.

1. Excluded dividends (up to $200 on joint returns) and interest on All Savers certificates.
2. Bargain element of incentive stock options, i.e., the excess of the fair market value of the stock over the option price at the time the option is exercised. It is anticipated that this will not be a preference item if the option stock is disposed of within the same year the option is exercised.
3. Excess deductions for mining exploration and development, i.e., in excess of ratable amortization over 10 years.
4. Excess deductions for magazine circulation or research and experimental expenditures, i.e., in excess of ratable amortization over 10 years.

In order to avoid having a preference item for mining exploration and development, magazine circulation, or research and experimental expenditures, individuals may elect to amortize such amounts over 10 years, rather than claim any other deduction. This election may apply to any amount of qualified expenditures for the year but, once made, is irrevocable without the consent of the Internal Revenue Service (IRS).

Limited partners may elect to amortize any portion of their share of partnership intangible drilling and development costs (IDC) over 10 years as well. Other individuals may elect to capitalize any portion of IDC and recover their costs by using accelerated cost recovery allowances over a five-year period. IDC qualifies for investment tax credit. In either case, the portion of IDC elected to be capitalized and deducted over a longer period will not be a preference item.

The **only** personal deductions allowed as deductions from AGI in calculating AMTI are listed below.

1. A medical deduction that has been adjusted to reflect a 10 percent base, rather than the new 5 percent nondeductible base that is to be used for itemized deductions.

2. Casualty, theft, and wagering losses.

3. Charitable contributions.

4. Interest incurred to acquire, construct, or substantially rehabilitate property on a dwelling, i.e., house, apartment, condominium, or mobile home used by the taxpayer. It is qualified as long as the debt is secured by property that (when the debt was incurred) was a dwelling used by the taxpayer or a member of his family, or was the taxpayer's principal residence. Interest incurred on the taxpayer's principal residence is included at the time the interest accrues or is paid. (A special rule applies to debt incurred before July 1, 1982.)

5. An additional deduction is allowed for other interest to the extent of "qualified net investment income." For purposes of the alternative minimum tax, income from an interest as a limited partner or as a shareholder in a Subchapter S Corporation, where the taxpayer does not participate in management, will be considered qualified investment income.

6. Deduction for estate tax on income in respect of a decedent.

Itemized deductions that may be carried to other years for purposes of the regular tax, such as excess investment interest or excess charitable contributions, may not be deducted in computing AMTI in the current years. A net operating loss deduction (other than amounts arising prior to 1983) also is not allowable in computing AMTI. Thus, separate carry-over calculations must be made so preference items do not reduce AMTI in previous or subsequent years when net operating losses are generated.

Rules provide that the limitation based on income from non-United States sources will apply to AMTI. Only the foreign tax credit will be allowed to offset the alternative minimum tax. Further, any credits that reduced the regular tax below the amount of the alternative minimum tax will be available for carry back/carry forward to the other years in the carry back/carry forward period — they are not lost entirely.

The alternative minimum tax applies to estates and trusts, and tax preference items must be allocated between the fiduciary and the beneficiaries. (Other special rules apply.)

It may be possible to minimize the overall tax by realizing capital gains and exercising incentive stock options in 1982 as opposed to 1983. However, the complicated interplay of these rules hinders any clear-cut guide for a simple recommendation. You must consider your situation in light of the 1982 and the 1983 rules. **Professional assistance is strongly recommended in making decisions in this area.**

Line Two

Partial Individual Retirement Account (IRA) roll overs will be permitted after December 31, 1982, provided the withdrawn funds are invested in an eligible retirement plan. The overall limits on contributions and benefits available under qualified plans is revised. The maximum benefit for defined benefit plans is lowered to $90,000, based on a planned retirement at age 62, and must be reduced if retirement is scheduled before age 62. The contribution level for defined contribution plans is to cut $30,000. The maximum contribution for self-employed (Keogh) plans will be increased for years beginning after 1983. Limits will be placed on the amounts of loans from plans to participants.

Consideration should be given to maximum use of the old limitations in effect prior to the effective date of the new law.

Under the old law, participants who died could have the entire proceeds from a qualified plan excluded from their estates. Under the new act, participants dying after 1982 will be limited to an exclusion of only $100,000.

Line Three

The "floor" on deductions for unreimbursed medical expenses (other than medicine and drugs) has been raised from 3 percent to 5 percent of AGI. The provision that allows a separate deduction for one-half of health insurance premiums has been repealed. These premiums are treated, therefore, as other medical expenses (subject to the new 5 percent floor). You should consider shifting medical expenses into 1982.

Line Four

An additional floor on personal casualty or theft losses has been added to the present limit of the excess of $100 per occurrence). Only losses in

excess of 10 percent of AGI will be deductible in years beginning after December 31, 1982. This rule also applies to taxable years beginning prior to January 1, 1983, where the taxpayer elects to claim a disaster loss in the taxable year prior to the year in which loss actually occurs.

Line Five

The requirement for filing declarations is eliminated. This **does not** include estimated tax payments.

Line Six

The new law provides relief from some of the penalties that may apply to individuals failing to make estimated tax payments. An individual cannot be held liable for the criminal penalty if he comes within an exception to the civil penalty. An exception is also made when the individual had no tax liability for the preceding taxable year, as long as the taxable year had 12 months, and the individual was a United States citizen or resident for the entire year.

BUSINESS TAXPAYERS

A list (space in this issue does not permit further details) of changes of concern to **business taxpayers** follows.

Line Seven

1. Significant revision of pension and profit sharing provisions, including limitations on corporate plans and better correlation between corporate plans and individuals and partnership (IRA and HR-10) plans.
2. Reduction in benefits from capital recovery provisions — investment tax credit and accelerated cost recovery system. Consider accelerating the acquisition and placing in service of assets to 1982.
3. Phase-out of "safe harbor" leasing and liberalization of traditional "leveraged" leasing. (Transitional rules exist.)
4. Reduction in benefits under the completed contract method for long-term contracts. Consider entering into a contract prior to 1983.
5. Reductions in benefits from certain corporate preference items. Consider selling real property prior to 1983.
6. Extension of rules requiring capitalization of construction period interest and taxes for corporate taxpayers.
7. Rules intended to curtail tax-motivated mergers and acquisitions.
8. Acceleration of corporate tax payments.
9. Limitation on use of industrial development and mortgage subsidy bonds.
10. Extension of targeted jobs credit.
11. Changes in tax treatment of certain debt securities — original issue discount and coupon-stripping transactions.
12. Tightening of foreign tax credits on oil and gas extraction activities.
13. Reduction in benefits to life insurance companies through modified coinsurance arrangements.
14. Reduction in possessions corporation benefits — primarily, Puerto Rico.

TAXPAYER COMPLIANCE

Changes to increase **taxpayer compliance** include the following.

Line Eight

1. Increased information reporting.
2. Withholding on payments of dividends and interest.
3. Change in methods of computing interest on tax deficiencies and refunds.
4. Greater penalties for underpayments of tax.
5. Greater penalties for failure to provide information to the Internal Revenue Service.
6. Partnership audits.

OTHER CHANGES

Other changes include an increase in unemployment, cigarette, telephone, and aviation excise taxes, and "safe harbor" tests for classification of individuals as independent contractors.

BEYOND THE BOTTOM LINE

You should consult with your tax adviser concerning your tax situation. You should **not** rely on this column for your tax decisions. There is **more** to this act!

The Process of Industrial Development in Smaller Communities and Rural Areas

By Fred J. Gassaway

In spite of recent record years for the announcement of new and expanded industries, South Carolina is, and will continue to be, a rural state consisting primarily of small communities. Being rural in nature does not mean that the economy is totally dependent on agricultural income. In fact, comparison of the changes taking place in South Carolina relative to the rest of the nation reveals some rather interesting trends.

SOUTH CAROLINA'S NEW RURAL FACE

According to 1982 estimates of the U.S. Department of Agriculture, the number of farms in South Carolina decreased from 36,000 in 1975 to 33,000 in 1982, a drop of 8 percent. This compares with only a 2 percent decrease in the number of farms nationwide.

A more dramatic change is taking place in farm acreage in South Carolina. Between 1972 and 1975, farm acreage in this state declined from 6.8 million acres to 6.1 million acres, or 10 percent. Nationally, however, farm acreage declined only 2 percent.

Changing trends in agriculture are, of course, well known, as are many of their causes. For example, an average farm in South Carolina consists of 185 acres, while the national average is 429 acres. With the exception of a few high valued cash crops such as peaches, tobacco, and tomatoes, South Carolina's agricultural production is limited in yield per acre compared with the rest of the nation. Confronted with the rising costs of production, low volumes, and small acreages, marginal farm operators have been faced with basically three choices. The first is to maintain a subsistence living based entirely on agricultural production. The second is to stop farming altogether and seek employment elsewhere, usually in an urban area. The third is to obtain off farm employment to supplement farm income while maintaining an agricultural or small town environment and life style.

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While there will always be some subsistence farm operators, particularly those not having the skills or job opportunities to seek off farm incomes, the majority of farm operators in South Carolina have chosen to supplement their farm incomes by seeking off farm employment. In fact, 61 percent of South Carolina's farm operators reported some off farm employment in 1978, with 42 percent reporting at least 200 days or more. The total percentage of farm operators listing farming as their principal occupation was only 42. There remain, of course, those individuals who have sold their farms and moved to urban areas, thereby contributing to the urbanization of South Carolina's larger municipalities. If the economic stability of smaller communities, which at one time was totally dependent on the area's agricultural base, is to continue, the availability of jobs in the manufacturing and service sectors in smaller communities must be increased.

The purpose of this article is neither to chronicle the transformation of South Carolina agriculture nor to analyze the mobility of the rural work force. Rather, it is to highlight the congruous nature of industrial location in smaller communities, limitations to that location potential, and possible ways to improve the location potential in small communities and rural areas.

INDUSTRIAL LOCATION IN SMALLER COMMUNITIES

Most companies use a rather formalized criteria listing of the attributes required or preferred when

Lakewood Plantation is a premium pork processing facility constructed in 1981 near Nesmith in Williamsburg County, South Carolina. The USDA approved facility has 100 employees and ships high quality pork products throughout the United States.

selecting states and communities to visit and specific sites to review in detail. Although these criteria will vary from company to company, just as the attributes of communities will vary, most companies select the optimum community and site based on their desire to do two things: minimize risks and maximize profits. Market access; the costs and availability of water, sewer and electric power services and skilled manpower; and other key considerations are carefully scrutinized and compared for various potential site locations by company representatives to determine which site will best meet the risk and profit criteria.

Limitations and Advantages

A 1981 survey conducted by The University of North Carolina of 317 facilities that had located or expanded in North Carolina, South Carolina, and Virginia over the previous 5 years identified the importance of 19 business factors that influenced their choice of sites. As shown in Table 1, among the 204 respondents, the top 5 factors were (1) state and local industrial climate, (2) labor productivity, (3) transportation, (4) land availability and room for expansion, and (5) cost of land and construction. The conclusions drawn by the researchers reinforced the phenomenon that manufacturing has been moving out of centralized large cities in the North and into the suburbs of smaller cities and nonmetropolitan areas. The problem, however, is that not all of the smaller communities are

TABLE 1. Ranking of Business Location Factors For Companies Locating in South Carolina, North Carolina, and Virginia, 1976-'81

Factors	Rank By All Firms
State/Local Industrial Climate	1
Labor Productivity	2
Transportation	3
Land Availability/Room For Expansion	4
Cost of Land and Construction	5
Wage Rate	6
Business Taxation	7
Electricity Availability/Cost	8
Skilled Labor Supply	9
Proximity to Suppliers/Services	10
Proximity to Markets	11
Unskilled Labor Supply	12
State/Local Environmental Regulations and Permit Processing	13
Water Supply	14
Availability of Technical Training Programs	15
Fuel Availability/Cost	16
State Financial Incentive	17
Public Wastewater Treatment Capacity	18
Solid/Hazardous Waste Disposal Facilities	19

Source: John S. Heckman, "What Are Businesses Looking For? A Survey of Industrial Firms in the South," **Economic Review** (1981).

FIGURE. South Carolina Standard Metropolitan Statistical Areas (SMSA's)

prepared to receive industrial locations and are being bypassed for those communities naturally blessed with close proximity to larger cities.

Another 1981 study of major population shifts, conducted by Dr. John F. Jakubs of The University of South Carolina Geography Department, found that, between 1970 and 1980, suburban and rural counties outgained urban counties, particularly in Southern and Western states. Reasons given were lower living costs and a greater appreciation of such nontraditional amenities as recreation opportunities. Other reasons given were the growth of job opportunities brought about by the location of energy related and manufacturing industries in these counties.

Community leaders seeking to attract and receive industrial prospects view a company's decision to locate as a progressive move, producing jobs, additional revenue, a broader economic base, and a vote of confidence as to the desirability of the area. Few community leaders would deny that such results of industrial location are beneficial. Unfortunately, the majority of South Carolina's 254 communities with populations under 10,000 do not have the total resource base to meet all the needs of most medium and large size industries. Their only consolation may be that communities in other states competing for industries lack similar resources and amenities, such as large manpower pools possessing a variety of skills, industrial sites with adequate water and sewer capacities, and available housing and cultural facilities.

Although it may seem contradictory, few industries locating in South Carolina in recent years selected urban sites where such resources were available. Rather, most of them selected smaller communities near larger metropolitan areas that provided housing and cultural amenities and transportation facilities. Such sites also provided

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TABLE 2. New Plant Announcements By SMSA and State Totals, 1975-'81

Areas	1975	1976	1977	1978	1979	1980	1981	Total
Aiken County*	2	2	1	3	2	1	3	14
Anderson SMSA								
Anderson County	3	—	5	4	8	3	3	26
Charleston SMSA								
Charleston County	1	—	—	2	5	—	1	9
Berkeley County	4	3	6	—	1	—	2	16
Dorchester County	2	1	3	—	2	2	5	15
Columbia SMSA								
Richland County	4	—	4	4	6	4	4	26
Lexington County	3	—	2	6	3	2	2	18
Florence SMSA								
Florence County	—	—	—	3	7	1	—	11
Greenville-Spartanburg SMSA								
Greenville County	6	8	3	12	15	11	5	60
Spartanburg County	6	5	2	4	9	10	9	45
Pickens County	1	—	—	—	4	5	1	11
Rock Hill SMSA								
York County	3	5	4	7	6	2	4	31
Total All SMSA's	35	24	30	45	68	41	39	282
Total State	56	51	53	74	105	66	72	477

Source: Compiled from annual announcement provided by the South Carolina State Development Board.
*Aiken County, South Carolina, included with Augusta, Georgia, SMSA.

expansion potential, larger acreage purchases, and the freedom from urban problems many companies have experienced in older facilities in Northern and Midwestern areas. In this fringe area between rural and urban environs, the industrial development practitioner operates, trying to match locational criteria with available resources. It is also here that frustrations of not always having the perfect site are most pronounced and the creativity of the industrial developer must excel.

In 1981, 59.7 percent of the state's population lived in the 5 standard metropolitan statistical areas that consist of 12 of the most populous counties. (This is illustrated in the figure on page 35.) As might be expected, these 12 counties have captured most of the new plant investment announced in South Carolina, as well as most of the new jobs created. As shown in Table 2, between 1975 and 1981, 282 of 477 new plant announcements took place in these counties. These 282 companies announced their intention to employ 32,070 workers for the 51,212 new jobs to be created.

Possible Improvements

Finding a full utility site in smaller communities and rural areas is, at best, a challenging and often perplexing task. The lack of information about available utilities and the absence of an economic development professional usually means that these areas probably will not be given high consideration when matched against sites in more metropolitan areas. This does not mean, however, that the manpower, utility, and other requirements of many industries could not be met if more information were developed and made available to those involved in siting new facilities. Trade offs such as lower land costs and taxes, the rural work ethic, employee loyalty, and local leadership anxious to attract jobs are some of the tangible and intangible reasons smaller communities are receiving increasing attention from small and medium size companies with expansion plans.

Although sites in smaller communities are less prone to have full utilities, their desirability may be enhanced if an analysis is made concerning the proximity of existing water, sewer, gas, or electrical

service. Given such information, estimates of the costs necessary to upgrade these sites to full utility status could be made. The resulting total costs for an improved site in a rural community might be quite comparable to other, more expensive, existing full utility sites near larger metropolitan areas.

An emphasis on promoting industrial development opportunities in smaller communities and rural areas comes at a time when South Carolina's electric cooperatives are establishing themselves as a resource to these areas in attracting industrial firms. Central Electric Power Cooperative, the state's largest generation and transmission cooperative, provides power for 15 member systems serving major portions of a 35-county area, and utilizes an active site development program in encouraging industries to locate near smaller communities.

Of new plant announcements, 100 — or 22 percent — were in communities with populations of less than 2,500 (Table 3). One could hardly expect communities of such size to possess all of the resources necessary to attract industries, even though most of those referred to here were in relatively close proximity to larger municipalities. With few exceptions, water and sewer lines rarely extend much further than the incorporated limits of municipalities, thus requiring either ground water sources or septic tank treatment of sewerage. Smaller dry process industries, of course, may utilize such sites and are prime candidates for smaller communities. Further, Coastal Plain counties generally located between the coast and U.S.

TABLE 3. Plant and New Job Announcements By Community Size 1975-'81

Community Population	Number of Plant Announcements	Percentage of Total	Number of Announced New Jobs
0- 2,499	100	21.0%	11,948
2,500- 9,999	158	33.1	17,499
10,000-24,999	66	13.8	8,014
25,000-49,999	47	9.9	3,535
Over 50,000	106	22.2	11,216
Total	477	100.0%	52,212

Source: Compiled from annual announcements provided by the South Carolina State Development Board.

Highway #1 have greater ground water and stream flow potential and thus may meet an expanded criteria over rural sites in the upper Piedmont area.

Available to most of South Carolina's smaller communities is a key attribute: interstate and other primary highways. These highway systems particularly improve the desirability of smaller communities in meeting the commuting patterns of workers and the movement of raw materials and finished products. Only one county, Georgetown, is more than 25 miles from an interstate highway. Georgetown County, however, has a port facility and U.S. 17 connecting with I-26 to the south and U.S. 321 to the north. No South Carolina community is more than a 1-hour drive from a commercial airport facility offering regularly scheduled flights. Therefore, **from a transportation consideration, the vast majority of South Carolina's smaller communities offer locating industries excellent access to markets.**

Having stated the limitations confronting smaller communities in attracting industries, as well as the natural advantages this state offers locating companies, we need to determine what, if anything, government should do to stimulate industrial development in smaller communities and rural areas, especially economically distressed areas, to maximize industrial location potential. Pure economic logic would dictate that our economy would be served most efficiently by deleting all incentives that encourage industries to locate in economically distressed areas. In the long run, it is argued, government's financial involvement in manpower training programs, industrial revenue bonds, water and sewer facilities expansion, and investment tax credits will be more costly than the benefits derived. Such logic, however, assumes that a region's manpower is completely mobile, able to seek and accept jobs that appeal to the skills and preferences of each worker.

Such is not the case. Manpower is not perfectly mobile, and the preponderance of small towns indicate that South Carolinians prefer to live in small communities. It should be noted here that in the 12 SMSA Counties, only 16 of the 109 incorporated municipalities have populations exceeding 10,000.

A worker's pay check earned elsewhere provides only limited benefits to the local community. If a county exports its manpower to another area, it will continue to suffer from the lack of a tax base, job diversification opportunities, and other amenities. A rationale thus exists for selective programs that state and local economic developers can utilize in improving the potential of manufacturing plants to locate in smaller communities where a substantial percentage of South Carolina's population resides.

To a large extent the public policy of South Carolina has been oriented toward helping smaller

communities and the more rural areas of the state to improve their "quality of life." Burdened with low tax bases and correspondingly fewer services, lack of choice in job opportunities, and generally lower incomes and skill levels, these areas certainly have justification for seeking ways to improve their statuses.

The State Development Board has, for a number of years, placed an emphasis on preparing communities to receive industry. Its most recent high visibility program has been The GREAT Town Program (Governor's Rural Economic Achievement Trophy) which has also pointed out ways to improve the appearance and potential of industrial sites.

A forerunner of The GREAT Town effort was The STAND TALL Commission, conceived and implemented by South Carolina's consumer-owned electric cooperatives. The purpose of this program was to organize and work with rural committees to improve the overall community and industrial development potential of rural South Carolina. Among the commission's accomplishments were the establishment of rural water and sewer systems and the improvement of fire protection.

Conditions existing in South Carolina's rural area prior to the generation of successful industrial development, and still in existence today in many South Carolina counties, certainly are not unique to this state: they are the universal dilemma of regional industrial developers. In 1980, Governor Richard W. Riley created the Governor's Council on Rural Development as an advisory group on the development of policy for rural areas. Composed of professional, lay, and elected officials, the Governor's Council recommended the creation of jobs as a top priority. In defining the problem, the council found that rural communities cannot effectively sell themselves to prospective industrial clients and are unable to provide incentives and/or community amenities that would attract industries and jobs. Inadequate transportation systems, the low skill levels of the rural work force and the lack of full-service industrial sites are all contributory factors.

Recommendations for correcting this problem included tax incentives to promote industrial development, programs to create full-service industrial sites, and participation by state government in capital formation in designated areas. In conjunction with the Governor's Council, Max Heller, Chairman of the State Development Board, established a Rural Task Force in 1981. This task force consisted of professionals in the fields of banking, manufacturing, engineering, education, utilities, agriculture, government, and others, and utilized the professional staff of the State Development Board in identifying, and recommending solutions to, problems of rural economic development. Among the suggestions made by the task force were those that financial incentives and innovative programs be established through the legislative process to foster industrial development in rural areas; that the availability of water, sewer, and other services be expanded in smaller communities; and that the TEC system's remote training facilities be implemented. It was further suggested that a department within the State Development Board should specialize in rural development.

Although recommendations of this type frequently are never implemented, several basic components of the State Development Board's Rural Task Force were adopted. A formula was established for targeting six counties of greatest need for special emphasis based on unemployment, education, and income statistics. A team of four industrial agents was formed to specialize in industrial promotion of rural communities. The Governor's Office later expanded this list to 16 counties using the same criteria, and earmarked certain funds to be available to improve their economic development potential, mainly through the creation of jobs. These designations were followed by an amendment of Senator James Waddell of Beaufort County to the Legislative Appropriations' Bill whereby 23 counties would be eligible for certain job creating incentives. These incentives included income tax credits for manufacturers, processors, and distributors locating in a county during the years in which that county is designated less developed, equal to 1 percent of the investment cut when the investment is $100,000 or more and results in the creation of new jobs; and a $200 job credit for each full-time new employee resulting from an investment of $100,000 or more.

The Waddell Amendment was deleted from the Appropriations Bill during the 1982 legislative session. It is not known if reconsideration will be given similar legislation in 1983.

Interest is being expressed currently in considering some incentive programs for the entire state in the form of an enterprise bill and possibly enterprise zones such as those already adopted by Virginia, Ohio, and several other states. Of course, the net effect of such legislation if incorporated by all states in a region or possibly the entire country would be to cancel out the competitive edge the individual state legislation sought to establish.

Many companies, however, are confronted with disincentives that limit their potential for capital expansion. Given high interest rates, overly restricted regulatory controls and unfair competition with international companies subsidized by their governments, a stronger argument may exist for enterprise legislation to foster national and international competition.

The Reagan Administration has embraced a concept of urban enterprise zones. At the same time, however, it has taken steps either to eliminate or reduce substantially programs that facilitate industrial development in rural areas and smaller communities.

Several federal programs have been utilized to promote the economic development of areas of special need, with varying degrees of success and criticism. Space will not permit a complete evaluation of each of these programs here. The Economic Development Administration, Urban Development Action Grants, the Business and Industrial Loan Program of the Farmers Home Administration (FmHA), and federal and state regional commissions, among others, have either been discontinued, curtailed, or threatened with severe cutbacks by the current administration. The status of the Business and Industrial Loan Program is unknown at this time. However, in the eight years it has been in existence in South Carolina, FmHA has guaranteed 66 loans in the manufacturing sector for a total of over $76 million, and 216 loans for all purposes totaling nearly $148 million. Among South Carolina communities with populations of under 10,000, 166 have received a total of $114.6 million in guaranteed loans, and 97 with populations of under 5,000 each have received a total of $74 million in guaranteed loans.

At this writing, the status of the Economic Development Administration's various programs also is unknown. EDA was formed in 1965 to serve as the primary agency to assist in the creation of jobs in economically distressed areas of the country. South Carolina has received $140 million through EDA, with approximately $60 million going to 65 communities for water and sewer facilities. These funds were part of a matching program with state and local government participation. According to estimates from EDA surveys, that agency has helped to create one job for every $5,000 invested in public works projects, or 12,000 jobs. EDA's business development loans to assist South Carolina companies in locating or expanding have totaled over $15.5 million and have created over 1,550 jobs.

EDA has come under increasing criticism, however, since the areas of eligibility have grown to include 80 percent of the country. Although EDA is politically popular among many constituents, the administrative emphasis away from federal government participation in economic development activities may shortly eliminate this agency as a source of funding for community water and sewer systems, one of the primary resources for small communities seeking to attract industries.

Urban Development Action Grants (UDAG), the Small Business Administration's 503 Program, and others were designed to assist communities in locating and financing commercial and industrial firms. The utilization of UDAG depends, to a large extent, on the commitment and expertise of local community officials to making their communities eligible. UDAG funds may be utilized to improve sites, while the SBA 503 Program provides small commercial and industrial firms with slightly lower interest rates for capital investment purposes.

The concept of enterprise zones traditionally has been utilized to promote renewed economic development in urban areas. In 1981, H.R. 3824 was introduced by Congressmen Kemp and Garcia of New York in response to urban economic problems. Known as the "Urban Jobs and Enterprise Zone Act of 1981," this bill sought to amend the Internal Revenue Code of 1954 to provide "certain community development, employment, and tax incentives for individuals and businesses in distressed areas."

This bill, as introduced, does not address the distressed rural areas across the country. As a result of this omission, several separate bills have been introduced in the U.S. House of Representatives directed entirely at rural economic development. Senator John C. Danforth (Missouri) introduced the "Rural Enterprise Act of 1981," S. 1829, which addressed various ways of assisting commercial enterprises in locating in designated rural areas based on HUD unemployment and poverty criteria. A virtually identical bill, H.R. 6689, was introduced in 1982 by Congressman Robin L. Beard (Tennessee). Neither of these bills, however, provides for water and sewer facilities, two of the most critical limitations of industrial development in smaller communities, but were limited to tax incentives and regulatory relief.

The third bill, H.R. 4576, introduced by Congressman Wes Watkins of Oklahoma, cosponsored by Congressman John Napier of South Carolina, and supported by a majority of the Congressional Rural Caucus, addressed rural economic development in

broader terms. Known as the "Rural Enterprise Zone Development Act of 1981," this bill would utilize FmHA to determine eligibility of certain rural areas and to administer the program. The purpose of H.R. 4576 would be to

> amend the Agricultural Act of 1961 to allow the Secretary of Agriculture to provide financial assistance for the economic development of rural enterprise zones, and to amend the Internal Revenue Code of 1954 to provide tax incentives for small businesses located in rural enterprise zones.

Unlike the state enterprise zone legislation implemented in Virginia and Ohio, H.R. 4576 would limit the number of enterprise zones to 25 the first year of enactment, with 10 additional zones each subsequent year. The life of such zones would terminate after 10 years.

Congressman Watkins' bill would provide grant money for rural enterprise zones, up to 90 percent of the total projected facilities costs, such as water and sewer extensions, where such assistance would directly or indirectly result in the attraction or expansion of a business. Loan guarantee provisions and direct loans also would be made available to companies locating or expanding in the zone, utilizing a formula based on the number of jobs created.

This bill would reduce taxes in two ways. First, it would provide tax credits to companies locating and expanding in the zone. Second, it would give tax credits to private financing institutions who finance qualified companies.

Another portion would allow a small business to accelerate depreciation at a rate not to exceed 25 percent allowable under current rates for a period of not more than 10 years. Other provisions include community facility loans to rehabilitate older buildings and equipment located in the zone.

The United States Department of Agriculture would utilize a point system to determine eligibility. An applicant area's poverty rate, unemployment rate, and per capita income growth rate would be compared with the national average.

Given the revenue short fall that exists in 1982, the passage of any of these three bills is doubtful. In the broadest of concepts, the enterprise zone concept merits further consideration at both the state and federal levels, not just as a tool for one community or state to compete with another, but as a means for American industries to compete in the international market place with subsidized international firms.

CONCLUSIONS

South Carolina, being a state well situated in the Mid-Atlantic marketing area, will continue to attract industries seeking to expand or relocate manufacturing facilities. **From recent announcements and a general knowledge of limited resources available to support new industrial locations, we know that most companies prefer to locate in communities with populations of less than 10,000.** We also know that a **considerable number of new companies** are willing to pay a fair share of providing the services required to meet their operational needs and **are locating in towns with populations of less than 2,500.** State and federal legislation programs, when targeted to specific enterprise zone areas, can have a positive influence on the community's ability to attract industries and to create a more diversified tax base and job opportunities. Such opportunities will not only help ensure off farm job potential for part-time farmers, but will also afford everyone living in smaller communities additional choices of employment and a higher quality of life.

An Innovative Approach to REDI: Rural Economic Development

By James L. Hammond, Jr.

Through the decades of the 1960's and 1970's, there were many state and federal programs available to assist towns and counties in the area of economic development. With the advent of the 1980's, things changed. The long period of economic recession, which in turn reduced state and federal

revenues, led to tremendous reductions in aid programs. As a result, the Rural Economic Initiatives Program was developed.

To understand why the Rural Economic Development Initiatives Program was established, one must first take a look at some of the existing programs for economic development in South Carolina. The South Carolina State Development Board has as its mission the attraction of industry to South Carolina. It is not overly concerned with where the industry locates in the state, just that it decides to locate here.

Many of the counties have local development boards or commissions either separate from, or part of, the local Chamber of Commerce. In most cases, outside of some of the larger counties, these operate on very limited funds. Many of the utility companies are also involved in economic development activities and provide services both to the state and to prospects. All of these organizations are keenly interested in attracting industry to their respective areas of South Carolina.

The 16 Technical Education Centers play a vital part in the development process by providing valuable training assistance and programs for new and existing industry. They work in close harmony with all of the above organizations.

The Governor's Office, through its Division of Community Development, works with local governments to assist in providing grants to build infrastructures so a community will be in a position to accept industry. The Governor's Office also has a Comprehensive Employment and Training Division responsible for administering Comprehensive Employment and Training Act funds. A section of this program, Title VII, requires the state to establish a Private Industry Council to set priorities for the expenditure of these funds. Governor Dick Riley has appointed Bob Royall, President of The Citizens and Southern National Bank of South Carolina, to serve as Chairman of this council.

The above listed organizations represent a majority of the effort directed toward economic development in South Carolina. As happens in most states, industry gravitates toward the larger metropolitan areas. This is true because these areas have the amenities necessary to attract industry. In the rural areas, many of the communities do not have basic water and sewer facilities, precluding them from even being considered for plant location.

It has often been stated, since the early campaign days, that one of Governor Riley's goals would be to try to effectuate balanced growth in the state. This has received more emphasis recently because of the reduction of assistance programs for aiding communities in preparing for industry. In October 1981, Governor Riley asked Bob Royall to chair a sub-committee of the Private Industry Council. The basic goal of this subcommittee was to create jobs in the most distressed counties of the state. Immediately, Royall appointed the members to what is now recognized as the Rural Economic Development Initiatives (REDI) Committee. These individuals, in addition to Royall, are Bennett Helms, President of Organization and Investment, Inc.; Dr. James F. Kane, Dean of the College of Business Administration at The University of South Carolina; Max Heller, Chairman of the State Development Board; Perry Palmer, Director of Johnson's Funeral Home; and Elliott Franks, a Staff Member of the Governor's Office, Division of Small and Minority Businesses.

Once the REDI Committee was organized, it set out to formulate its objectives. The first order of business was to select criteria for designating the targeted distressed counties. Since the State Development Board had already developed specifications that would serve this purpose, the committee decided to adopt them for their use. They are (1) per capita income, (2) average weekly wage, (3) number of individuals below the poverty level, (4) percentage of individuals on food stamps, and (5) percentage

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of unemployment. These factors were weighted and the counties ranked accordingly. The committee reviewed the rankings and selected the following counties as their target group:

1. Marlboro
2. McCormick
3. Clarendon
4. Allendale
5. Williamsburg
6. Lee
7. Jasper
8. Saluda
9. Dillon
10. Marion
11. Colleton
12. Orangeburg
13. Bamberg
14. Sumter
15. Hampton
16. Georgetown

It was also the decision of the committee to update the selection criteria on an annual basis. Committee members then reviewed the economic development activities of other agencies so they would not duplicate, but rather would augment, activities that were ongoing. Since two-thirds of all new jobs come from expanding businesses, the committee established, as its first priority, working with existing industries in the targeted counties. The emphasis, of course, was on exploring potential expansion possibilities.

It is important to note, at this point, that in the initial planning stages for the establishment of the REDI Committee it was determined there should be some special incentives available for use in the targeted counties. Therefore, the Private Industry Council set aside $500,000 of CETA Title VII funds for this purpose. These funds can be used to establish individually tailored training programs for industries. In addition, there has been made available a set-aside of $2.7 million of Community Development funds. While these funds are for statewide use, the REDI Committee has priority in applying for them.

The next task to be undertaken was the establishment of guidelines and procedures for the committee to use in working with the counties and the businesses and industries. Bennett Helms was designated to chair a committee to draft these directives. After a series of meetings the Guideline Committee adopted the specifications listed below for applying the Community Development set-aside funds.

I. ELIGIBILITY

A. The immediacy or nature of the project must preclude the use of the normal Community Development Block Grant (CDBG) process or other funding.

B. Only a city or county may apply.

C. There must be a leveraging of private/public investment.

D. There must be a firm private/public commitment.

E. Jobs must be created or retained that impact low and moderate income individuals.

F. There can be no intrastate job transfers.

II. AWARDS

All eligible activities will have a ceiling of $250,000. Awards will be considered on a bi-monthly basis to ensure maximum flexibility.

III. INTEREST RATES — TERMS — GRACE PERIOD

A. Interest rates will be 70 percent of prime, and will be computed the day the Governor approves the project, and will remain fixed for the term of the loan.

B. The term of the loan will vary according to individual project needs. Maximum term will be 15 years.

C. The committee may grant a grace period on repayment of principal and interest as follows:

1. two years on principal
2. two years on interest

The committee also set the condition that all interest generated from the initial projects be reverted to the state for use in funding future projects. The principal is to remain with the county to be used as a revolving loan fund for economic development. Because of the newness and uniqueness of this program, the interest rates, terms of loans, and other criteria will surely change as the program matures.

The following scenario tracks a typical project. Once the REDI staff has been contacted concerning a potential project, a site visit will be made to determine its eligibility and potential. If it meets

the above mentioned criteria, the REDI Committee will ask for a formal application. If the application is received at least 30 days prior to the bimonthly meeting of the REDI Committee, the proposal will be considered. If fewer than 30 days, it will be shifted to the next cycle. Once received, the application will be reviewed by the Engineering and Community/Employment Review Committees. After a thorough review, these committees will rate and rank the projects and make a formal recommendation to the REDI Committee. The full committee will then review the projects and forward those recommended for funding to the Governor for approval. Once the Governor approves the projects, contracts will be executed between the state and the city or county involved. In turn, the city or county will prepare loan agreements with the business involved.

During the period the guidelines were being developed, the REDI staff, consisting of this author, who serves as full-time project director; and Harold Jarvis, Senior Vice-President of The Citizens and Southern National Bank of South Carolina, on loan part-time; was busy coordinating with various organizations. The staff also made visits to the targeted counties to meet with the local industrial development directors to explain the role of the REDI Committee and to seek their assistance in working with local industries. As a result of these initial meetings, two projects were generated, and, through CETA Title VII, funds were granted to establish an aquaculture-mariculture project in Georgetown to train 25 workers. In addition, an on the job training project in McCormick County resulted in 72 new jobs.

Once the Community Development Set Aside guidelines and procedures were firmly in place, the committee began its first cycle of activity. This June-July 1982 cycle generated six formal applications. After reviewing the applications, the committee recommended five projects for funding. On August 16, 1982, Governor Riley approved all five projects. As a result, the committtment of $945,000 in loans translated into the creation of two new businesses, the expansion of three existing businesses, and — very importantly — the creation of 130 new jobs. It is anticipated that an additional 250 jobs will be created by these businesses over the next 3 years.

In summary, as the REDI Committee continues its activities into the future, it will be looking for creative and innovative ways to approach rural economic development and to accomplish its objective of immediate job creation.

Industrial Development in South Carolina: An Evaluation

By Nancy Grden-Ellson

Industrial development in South Carolina. Mere mention of this much discussed topic evokes a "pat each other on the back" response from the public as well as from the state's industrial development specialists. After all, national studies of business climate consistently rank South Carolina high on the list of 50 states (and those that do not usually have a "statistical aberration" of some sort). Add the publicity surrounding each industrial investment announcement and the visibility of a manufacturing plant under construction and you have credence for the perception that South Carolina is, in fact, an industrial development powerhouse.

But are these perceptions fully justified? This article will attempt to gauge the state's industrial development progress, and use that evaluation as a basis for suggesting new directions for the state's development efforts.

SOUTH CAROLINA'S INDUSTRIAL DEVELOPMENT RECORD

It is not an easy task to evaluate South Carolina's actual track record in industrial development. Industrial development gains can be measured in many ways. Further, to compare the records of neighboring states can be like comparing the proverbial apples and oranges. It may not be valid, for example, to compare the number of jobs created in North Carolina with those created in South Carolina. Each state may have different industrial development objectives as well as different starting points that render such comparisons both useless and unfair.

The approach used here will be to measure South Carolina's progress "against itself" over time by examining several indicators of industrial

development success, including number of new and expanded plants, number of jobs created, investment dollars attracted, amount of foreign investment, diversification of the manufacturing employment base, and intrastate location of manufacturing facilities. South Carolina's ranking in national studies will also be noted where appropriate.

Number of Plant Locations and Expansions

Between 1950 and 1981, 1,935 plants announced they planned to locate in South Carolina, and 5,209 plants announced expansions during that period.[1] However, the average number of announced new locations increased from 46.3 per year during the 1950's to 68.9 in the 1960's — and decreased slightly to 63.3 per year during the 1970's. There were 79 announcements in 1980 and 71 in 1981. On the other hand, announced plant expansions per year increased substantially from 56.7 during the 1950's to 117.8 during the 1960's to 224.4 in the 1970's. During the period 1977-'81, an average of 573 expansions per year were announced. No doubt many of these expansions resulted directly from previously announced plant locations.

More difficult to determine is the number of announced plant locations and expansions that actually took place. This effort is complicated by two factors. (1) There is usually a time lag between the announcement and actual plant operation although two years is probably typical. (2) No state agency determines whether announced plant openings and expansions actually occur. One study that did compare new plant announcements with openings in South Carolina during the 1970's found that 63 percent of the announced new plants were actually listed in the **1982 South Carolina Industrial Directory.** Of the remaining 37 percent, the vast majority (95 percent) were announcements made by South Carolina based firms that employed fewer than 100 people.[2] No similar study examining announced and actual plant expansions in South Carolina could be located. While it may not be valid to draw conclusions from this one study, the implication that fewer than two-thirds of the plant announcements actually took place is of some concern.

A popular misconception is that entire firms are relocating to the Southeast, and to South Carolina, from the so-called Frostbelt. Such is not the case. One study found that firm relocations generally occur within, not between, regions. Another study found that "even [Northern] states with declining industrial bases lost only about one-tenth of 1 percent of their employment per year from out-migration of firms."[3] Instead, many new manufacturing facilities are branch plants of firms headquartered outside of South Carolina. By 1981, 963 plants in the state had headquarters located out-of-state, while another 263 facilities listed a South Carolina community for their headquarters. Of the firms with out-of-state headquarters, New York led the list with 274 branch plants in South Carolina. North Carolina had 77; Illinois, 61; Ohio, 57; Pennsylvania, 48; and New Jersey, 46.4.[4] (See Map 1.)

A national study of plant location decisions ranks South Carolina third of the eight states in the South Atlantic region for both its number of on-site expansions and its number of new branch plants as a percentage of existing plants during the 1970's. Also significant is its record on plant closings. South Carolina ranked second in the region in number of plant closings (#1 having the fewest). It ranked #1 in number of plants that opened and then closed within the decade.[5]

Number of Jobs Created

The number of plant openings and expansions can be criticized validly as a measure of industrial development because it does not reflect what is probably the prime role of this activity — creation of jobs. This was expressed as the major goal of

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[1]Planning and Research Division, South Carolina State Development Board, Columbia, South Carolina (1982).

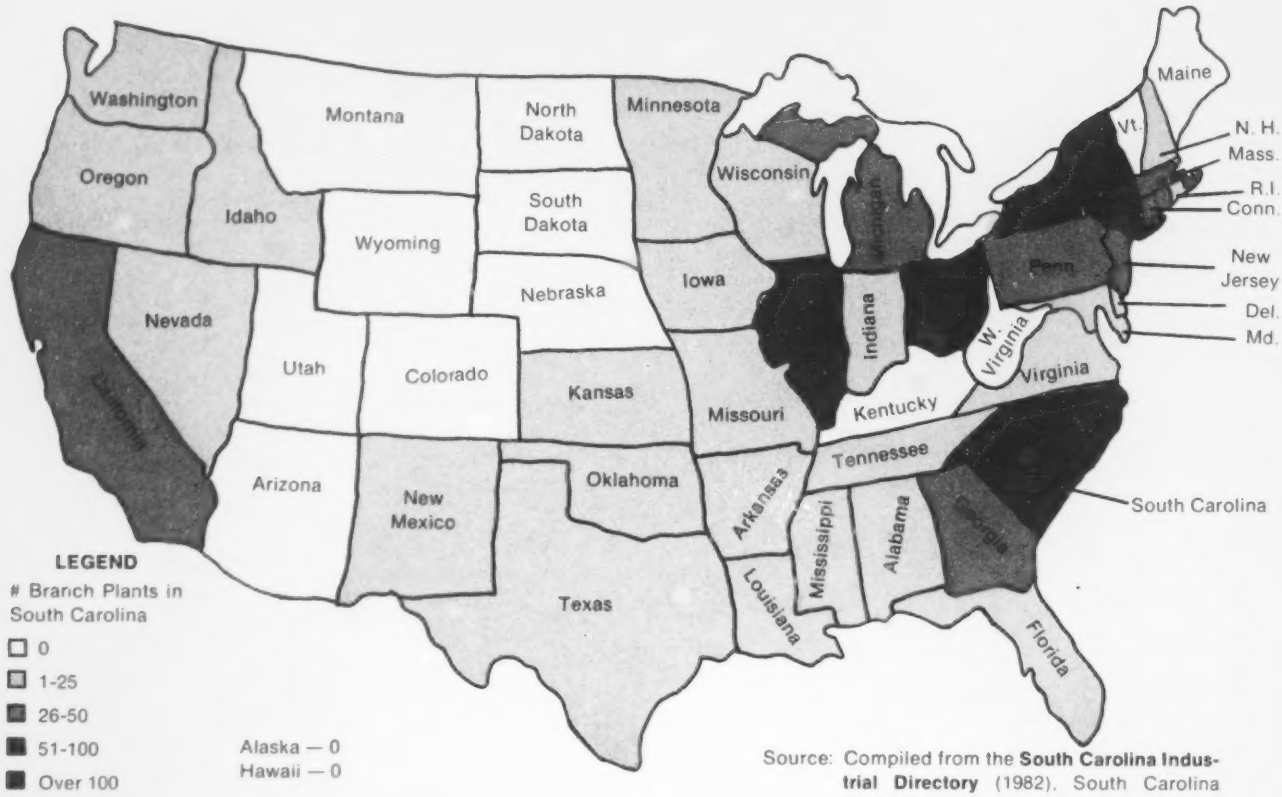
[2]Nancy T. Matthews and Richard B. McKenzie, "New Plant and Employment Gains in South Carolina During the 1970's," **Business and Economic Review** (October 1982).

[3]Roger W. Schmenner, **The Location Decisions of Large, Multi-Plant Companies** (Boston: Joint Center for Urban Studies of the Massachusetts Institute of Technology and Harvard University, September, 1980): p. 47; and John Hekman and Alan Smith, "Behind the Sunbelt's Growth — Industrial Decentralization," **Economic Review,** (March 1982): 5.

[4]Compiled from the **South Carolina 1982 Industrial Directory,** South Carolina State Development Board, Columbia, South Carolina.

[5]Schmenner, **The Location Decisions,** p. 38.

MAP 1. Headquarters States for South Carolina Branch Plants



Source: Compiled from the **South Carolina Industrial Directory** (1982). South Carolina State Development Board, Columbia.

South Carolina's industrial development program. Announced job creation from new and expanded plants totaled 72,493 during the 1950's, 168,804 during the 1960's, and dropped to 148,022 during the 1970's — for a total of 389,319.[6]

More announced jobs per year were created from new plants than from expansions. During the 1960's, an average of 9,561 jobs per year resulted from new plants, while 7,398 resulted from expansions. During the 1970's, an average of 7,172 and 6,577 announced jobs, respectively, were created by new and expanded plants each year.

However, these announced employment gains do not translate directly into actual employment gains during that period. This is illustrated by the following analysis. (See Table 1). The base year for this comparison of announced and actual employment is 1955, when actual manufacturing in South Carolina was 230,000. Actual employment gains are added for the period 1956-'80 to arrive at the actual manufacturing employment in 1980 of 392,000,300 — an increase of 162,300 during that 25-year period.[7]

To calculate a comparable figure using announced employment gains, a time lag between the announcement of a new job and the creation of that job must be incorporated. For purposes of this analysis, a five-year time lag is used — a more liberal time period than the typical two-year period mentioned earlier. Therefore, announced employment gains for the period 1951-'75 are added to the 1955 actual employment base (230,000) to arrive at the 1980 manufacturing employment of 541,884 that would have been attained if announced gains had equaled actual gains — an increase of 311,884 jobs. The announced gains for 1951-'55 were added to the 1955 base employment level while the 1976-'80 gains were not added due to the use of the five-year time lag assumption.

This analysis highlights two points: (1) the actual employment gain of 162,300 over the 1956-'80 period is only 52 percent of the announced gain

[6]Planning and Research Division, South Carolina State Development Board, Columbia, South Carolina (1982).

[7]South Carolina Employment Security Commission, Columbia, South Carolina (1982).

of 311,884 jobs, even with the use of a five-year time lag; and (2) the announced gain of 311,884 new jobs for the period 1956-'80 would have more than doubled the existing manufacturing employment in South Carolina — which seems difficult to accomplish. Part of this discrepancy can be attributed to two factors. (1) A national economic recession in 1975, which severely affected the state's manufacturers, particularly textile, caused both lay offs and the creation of fewer new jobs than announced. (2) A second factor is the nature of an "announcement," that is, a firm may hire only a portion of its "announced" employment initially, with the remainder to be hired at a later date. However, the use of this 25-year period should obviate the effects of both factors.

When actual employment and the headquarters state for branch plants are compared, it can be seen that branch plants from firms headquartered in Northern states accounted for 42 percent of the new plant openings, but 56 percent of the new employment during the 1970's; South Carolina-based plants, on the other hand, accounted for 38 percent of the new plants, but 13 percent of the new employment. The remaining 20 percent of new plant openings resulted from the expansion of firms headquartered in other regions, and accounted for 31 percent of new employment. New branch plants from outside the state obviously were larger than those from within. The average firm size for South Carolina-based plants was 48 employees, but for branch plants of firms based in the West North Central states it was as high as 359.[8]

TABLE 1. Actual and Announced Employment Gains in South Carolina

Actual Manufacturing Employment: 1955	230,000	Actual Manufacturing Employment: 1955	230,000
Announced Gains in Manufacturing Employment:		Actual Gains in Manufacturing Employment:	
1951-'55[1]	+43,200	1956-'60	+13,600
1956-'60	+41,085	1961-'65	+43,300
1961-'65	+87,123	1966-'70	+53,100
1966-'70	+80,419	1971-'75[3]	- 100
1971-'75	+60,057	1976-'80	+52,400
1976-'80[2]			
Manufacturing Employment **with Announced Gains:** 1980	541,884	Manufacturing Employment **with Actual Gains:** 1980	392,300

Source: Compiled from information from the Planning and Research Division, South Carolina State Development Board; and the South Carolina Employment Security Commission, Columbia, SC.

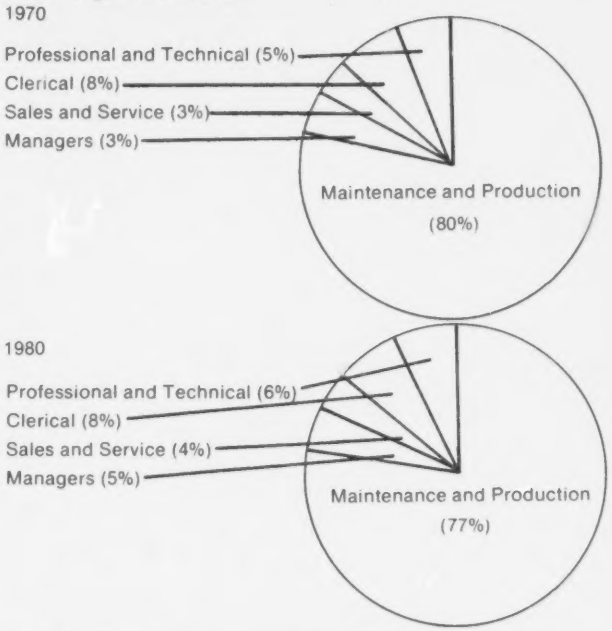
[1]Reflects five-year lag assumed between announcement and actual plant operation.

[2]Not included in total since assumed to appear in 1981-'85 actual employment gains.

[3]Reflects effects of national economic recession.

The types of occupations created by these manufacturing facilities are shown in Figure 1. In 1970, maintenance and production workers comprised 80 percent of the manufacturing work force,

FIGURE 1. Composition of South Carolina's Manufacturing Work Force*



Source: South Carolina Employment Security Commission, Columbia, SC.

*Percentage may not add to 100 due to rounding.

while 5 percent were professional and technical, 3 percent were managers, 8 percent were clerical, and 3 percent were sales and service workers. By 1980, the proportions had not changed appreciably, i.e., 77 percent of the positions were maintenance and production, 5 percent were managers, 6 percent were professional and technical, 8 percent were clerical, and 4 percent were sales and service. Further, managers were concentrated in the printing and publishing industries (11 percent), while there were fewest in apparel (2 percent). Professional and technical positions within manufacturing firms ranged from 20 percent in chemicals (where some research and development is now performed) to less than 1 percent in textiles. Maintenance and production positions ranged as high as 87 percent in the textiles industry. "Curiously, the same industries with a high number of maintenance and production workers [also] have a lower than

[8]Matthews and McKenzie, "New Plant and Employment Gains," p. 33, Table 1.

average number of professional and technical workers."[9]

Dollars of Industrial Investment

The statement "industrial investment tops the 1 billion mark" rings the same to industrial development specialists as "a profitable year" does to a firm's chief executive officer. Since 1973, there have been five years in which announced industrial investments in South Carolina topped the $1 billion mark. Announced investments in 1981 surpassed the $2 billion mark. The value of announced capital investments (in actual dollars) increased 229.5 percent from $1.23 billion during the 1950's to $4.05 billion during the 1960's. Further, it increased 122.7 percent to $9.02 billion during the 1970's — for a total of $14.29 billion worth of announced industrial investment between 1950 and 1980.[10]

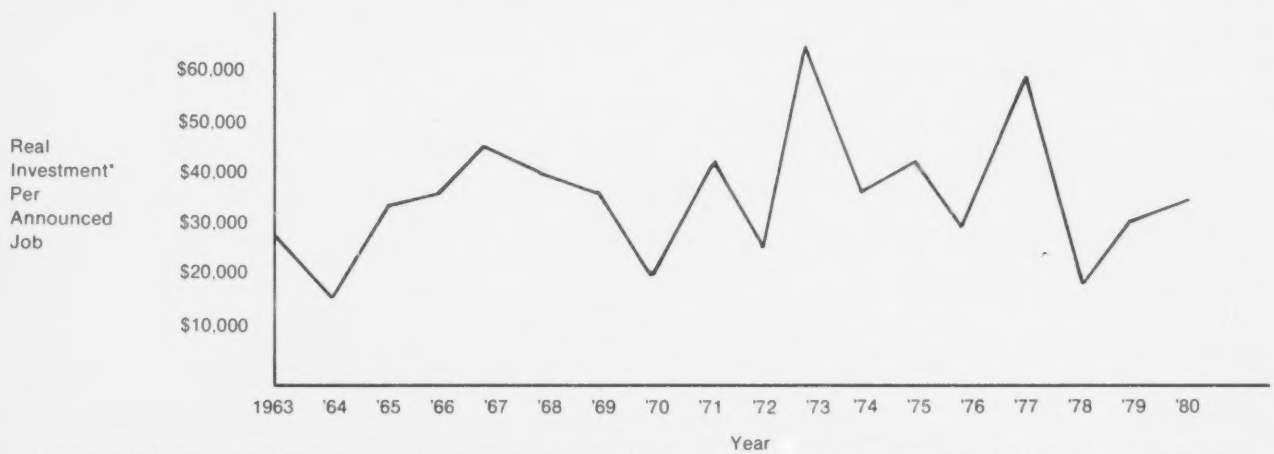
The value of announced industrial investments increased over the decades even when adjusted for inflation (using 1972 as the base year). Average annual real investment stood at $194.0 million during the 1950's, $515.7 million during the 1960's, and $667.0 million during the 1970's. Expansions outperformed new plants, particularly during the 1970's. Average annual real expansions increased 70.7 percent, from $230.9 millin per year during the 1960's to $394.3 million per year during the 1970's. Real investment in new plants, however, decreased 1.7 percent, from $284.8 million to $282.9 million per year during the same period.

The combination of increasing capital investment and a slackened pace of job creation over the decades suggests that more capital intensive industries are being attracted to South Carolina. However, when real announced investment per job is compared with unadjusted announced investment per job, that assessment is not as clear. As shown in Figure 2, real investment per manufacturing job announced by new plants averaged $32,520 per year during the 1960's and $38,750 during the 1970's — a substantial difference from $25,900 per year in the 1960's and $49,720 in the 1970's without the adjustment for inflation.

Announced investment that actually took place is more difficult to assess. The South Carolina Department of Labor reports there was a total of $7.8 billion of investment in manufacturing facilities through 1980 — an increase of 126.5 percent over the $3.45 billion through 1970. Reported investment increased 121.3 percent between 1960 and 1970, and 101.3 percent between 1950 and 1960.[11] Inflation-adjusted reported investment also increased over the decades, but it slackened considerably during the 1970's. It increased 56.9 percent during the 1950's, 66.3 percent during the 1960's, and 16.7 percent during the 1970's.

As with employment, announced investment dollars do not translate directly into reported

FIGURE 2. Real Investment Per Job Announced By New Plants in South Carolina



*Investment dollars as announced by the South Carolina State Development Board were adjusted for inflation (base year 1972=100) in order to determine real announced investment per job created.

[9]**The Manufacturing Industry in South Carolina,** (Columbia, SC: South Carolina Employment Security Commission, November 1981): pp. 13-25.

[10]Planning and Research Division, South Carolina State Development Board.

[11]**South Carolina Department of Labor Annual Report** (for each year 1950-'81) (Columbia, SC: South Carolina Department of Labor).

actual investment. An analysis similar to that used for employment gains illustrates this point. (See Table 2.) The base year for comparing announced and actual manufacturing investment is 1955, when actual manufacturing investment stood at $1.23 billion. Actual unadjusted dollars of investment are added for the period 1956-'80 to arrive at the actual manufacturing investment total of $7.83 billion in 1980 — an increase of $6.6 billion during that 25-year period.

TABLE 2. Actual and Announced Manufacturing Investment Gains in South Carolina

Actual Manufacturing Investment: 1955	$1,227,541,810	Actual Manufacturing Investment: 1955	$1,227,541,810
Announced Gains in Manufacturing Investment:		Actual Gains in Manfacturing Investment:	
1951-'55[1]	+ 509,334,000	1956-'60	+ 333,666,501
1956-'60	+ 719,813,000	1961-'65	+ 531,488,344
1961-'65	+1,573,900,000	1966-'70	+1,363,018,945
1966-'70	+2,476,171,000	1971-'75	+2,710,374,850
1971-'75	+3,383,144,000	1976-'80	+1,660,409,690
1976-'80[2]			
Manufacturing Investment **with Announced Gains:** 1980	$9,889,903,810	Manufacturing Investment **with Actual Gains:** 1980	$7,826,500,140

Source: Compiled from information from the Planning and Research Division, South Carolina State Development Board; and the South Carolina Department of Labor, Columbia, SC.

[1]Reflects five-year lag assumed between announcement and actual plant operation.

[2]Not included in total since assumed to appear in 1981-'85 actual investment gains.

To calculate a comparable figure using announced investment gains, a five-year time lag was incorporated into the analysis, as it was in the employment analysis undertaken earlier. Therefore, announced investment gains for the period 1951-'75 were added to the 1955 actual investment base ($1.23 billion) to arrive at the 1980 manufacturing investment of $9.89 billion that would have been attained if announced investment had equaled actual investment — an increase of $8.66 billion.

This analysis highlights two points. (1) The actual investment gain of $6.6 billion over the 1956-'80 period is only 77 percent of the announced gain, which is particularly significant in view of the billions of dollars being compared. (2) The announced gain in manufacturing investment for the period 1956-'80 is a 600 percent increase over the actual 1955 level of investment. While part of this discrepancy can be attributed to the process used by the South Carolina Department of Labor to collect manufacturing investment information, it is still the best source of actual investment information currently available.[12]

Foreign participation has been a major component of South Carolina's industrial investment. It stood at $32.0 million in 1960 and increased to $492.8 million in 1981. In 1960, it comprised 15.3 percent of total investment announcements, and in 1981, 20.6 percent. However, it has been as high as 46.9 percent (in 1974).

As of 1981, Great Britain had 48.1 percent of all foreign investment in the state, Germany had 21.6 percent and Switzerland had 15.5 percent. Foreign investments have been predominantly in the chemical and metalworking industries.[13]

The importance of these foreign investments is magnified when South Carolina is compared with other states. During the 1970's South Carolina ranked sixth in the nation for construction of foreign-based plants/thousand square miles and tenth for both number of foreign plants and foreign-based plants/thousand square miles. It ranked first in the nation for construction of foreign-based plants/million persons and second for number of foreign-based plants/million persons.[14]

Diversification of the Manufacturing Employment Base

A second expressed goal for the state's industrial development efforts is to diversify the manufacturing employment base. For the period 1968-'78,

> this state offers probably the best example of the Southeast's changing industrial structure. Textiles and furniture declined, and apparel, lumber, and paper grew slower [sic] than elsewhere in the region. All the newer industries increased faster than the regional average. Chemicals and machinery experienced the largest absolute gains.[15]

Table 3 exhibits this diversification in manufacturing employment. It should be noted, though, that part of the growth in the chemical and machinery industries is linked directly to the existence of the textile industry. "It was not until [textiles] reached a critical level of concentration that textile machinery . . . and chemical . . . found it

[12]The South Carolina State Tax Commission collects value of industrial property information. Its emphasis on assessed value, difficulties in comparing this information over time, and time lags in assessing industrial property over the 30-year period, however, precluded its use.

[13]Planning and Research Division, South Carolina State Development Board.

[14]Jane Sneddon Little, "Locational Decisions of Foreign Direct Investors in the United States," **The New England Economic Review** (July/August 1978): 59 and 60.

[15]"Survey of Location Decisions in the South," **Economic Review** (June 1982): 8.

TABLE 3. Actual Employment Gains By Industry in South Carolina and the Southeast (1968-'78)

Industry	South Carolina		Southeast	
	Gain*	Percentage	Gain*	Percentage
Textiles	(6.3)	(4.5)%	(27.4)	(4.2)%
Apparel	2.1	4.5	65.6	17.2
Lumber and wood products	1.6	12.2	33.0	21.1
Furniture and Fixtures	(0.9)	(17.6)	20.9	31.1
Paper	1.3	11.8	22.1	18.2
Chemicals	12.3	56.9	30.0	14.3
Rubber and plastics	10.4	315.2	64.0	123.1
Fabricated metal products	8.2	124.2	69.0	55.1
Machinery, except electrical	16.5	123.1	84.9	75.3
Electronic equipment	6.5	49.2	90.0	56.1
Transportation equipment	(0.8)	(23.5)	41.5	23.0
Instruments	3.1	119.2	24.0	114.8
Total Manufacturing	67.4	21.1 %	630.9	20.1 %

Source: "Survey of Location Decisions in the South," **Economic Review** Georgia (June 1982): 7.

*Noted in thousands of employees.

() Denotes a loss in employment.

advantageous to locate near their customers."[16] On the other hand, employment in some industries not directly linked to textiles, such as electrical and electronic equipment, grew during the decade, but at less than the regional average.

Much of the diversification in manufacturing employment that did take place during the 1970's was achieved through the attraction of branch plants headquartered outside South Carolina. For example, 34 percent of the new actual employment gains in the chemicals industry resulted from the expansion of Mid-Atlantic state based firms. Similarly, 90 percent of the new employment gains in instrument-related industries resulted from New England based plants, and 92 percent of the new employment in the electrical and electronic equipment industries emanated from Frostbelt based firms. South Carolina based plants were responsible for sizable employment gains in the apparel (39 percent), stone-clay-glass (35 percent), and fabricated metals (23 percent) industries.[17] (See Table 4.)

Intrastate Location of Manufacturing Plants

A third industrial development goal for South Carolina is to encourage the development of the state's rural counties. During the 1970's, the state's major metropolitan areas were the beneficiaries of most of the new plant location decisions. However,

> of South Carolina's 46 counties, all except Edgefield shared in the industrial gains directly resulting from the location of new manufacturing plants. . . . With the exception of . . . Allendale, Hampton, and Jasper, those counties with meager proportion are contiguous to, or at least are in close proximity to, other

TABLE 4. Proportion of New Employment by Industry and by State (1970-'79)

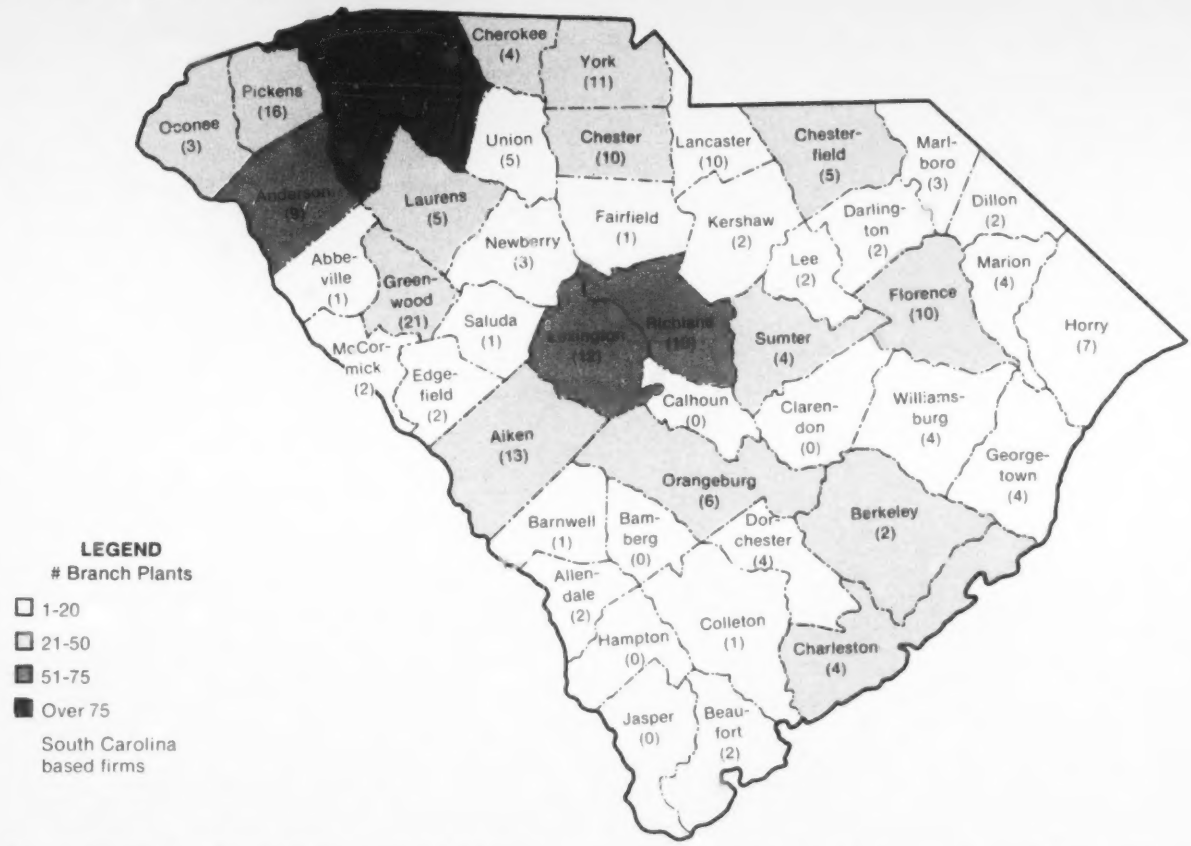
Industry	New England	Mid-Atlantic	East North Central	West North Central	South Atlantic	South Carolina	East South Central	West South Central	Pacific/ Mountain	Foreign	Total
Food	21%	17%			21%	21%				41%	100%
Textiles		28	22%		44	22	.3%	2%		3	100
Apparel		27			45	39			27%		100
Lumber and wood products		2	3		56				39		100
Furniture and fixtures		15	66		19	19					100
Paper	6		36	29%	18	14		11			100
Printing			100								100
Chemicals	14	34	11		38	7			.6	1	100
Rubber and plastics	1	2	22		10	9	4		.3	61	100
Stone, glass		5	44		38	35		12			100
Metals	10	55		.5	10	5			25		100
Fabricated metal products	15	8	5		23	23		36	1	11	100
Machinery, except electrical	12	26	33		8	8			2	19	100
Electronic equipment	20	33	29	17	1	1					100
Transportation equipment		9	84		7	7					100
Instruments	90	2						7			100

Source: Nancy T. Matthews and Richard B. McKenzie. Dept. of Economics, College of Commerce and Industry, Clemson University, Clemson, SC 29631.

[16]Hekman and Smith, "Behind the Sunbelt's Growth," p. 12.

[17]Matthews and McKenzie, "New Plant and Employment Gains," an early draft.

MAP 2. Location of Branch Plants in South Carolina



Source: Compiled from the **South Carolina Industrial Directory** (1982), South Carolina State Development Board, Columbia, SC.

counties with larger shares of the industrial gains. In this manner, the increased industrial activity in the nodal counties (those with greater growth) provides greater employment opportunities for the residents of those contiguous counties less fortunate in attracting new industries.[18]

As might be expected, larger plants tended to locate in the metropolitan areas. For example, 75 percent of Richland County's new manufacturing employment resulted from seven nonelectric machinery and fabricated metal plants. Greenville County was the recipient of the majority of new manufacturing facilities within most of the industrial classifications.[19] Firms from out-of-state tended to locate branch plants in more populous counties, which is not surprising since branch plants headquartered out-of-state were shown to be large employers and would seek more populous location. However, branch plants for firms headquartered in South Carolina often comprised a higher proportion of the total branch plants existing in less populous counties. (See Map 2.)

[18]Ibid.

[19]Ibid.

PUTTING NUMBERS INTO PERSPECTIVE

It can be seen from this brief overview that South Carolina has excelled in attracting branch plants from firms headquartered in other states or in foreign countries. As a result, diversification is beginning to occur in manufacturing employment, and jobs and investment have increased over the past three decades, although at a slower rate. There is reason to question, however, the extent to which announcements of jobs and investment translate into actual jobs and investment. Further, there are other issues to be considered, as seen in the paragraphs following.

Has the Industrial Development "Margin" Been Reached?

Numerous employment opportunities have been created through the attraction of manufacturing facilities to South Carolina. Can the state continue to depend however, on the importation of industrial

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activity? It appears that the "boom years" of development in the Southeast and South Carolina are waning and will be replaced by slower economic growth in the years ahead. For example, a 1980 survey of manufacturers by McGraw-Hill indicates that 53 percent of their capital investment will be undertaken in the Sunbelt — down from its peak of 60 percent during the 1970's.[20]

> As a whole, the South is not going to match what it did in the 1960's and 1970's . . . One change is the narrowing of regional differentials in freight rates . . . Another change is the cost of living . . . Differences in wage patterns are becoming less extreme . . . Moreover, the Reagan Administration wants to withdraw much of the federal money for local development that the area has been unable to generate for itself . . .[21]

In addition, the use of financial and other incentives to attract and retain industry has become universal.[22]

Can the "Quality" of Employment be Improved?

As pointed out above there has been diversification among manufacturing industries in South Carolina, but the diversification among occupations has shown less progress. This is a direct result of the type of manufacturing operations attracted to the state, and is characteristic of the "product life cycle" evident in manufacturing activity. Innovation and new product development tend to locate in well-established technology or industry centers where there is access to the necessary skilled labor and production is undertaken on a smaller scale. However, as production becomes mechanized, it can be undertaken on a larger scale and with less skilled labor. Therefore, "it is the relatively standardized production processes [that] are moving from the old industrial areas, while research and design, engineering, and management tend to remain behind."[23]

The classic example of this process is the textile industry. It has not always been concentrated in the Southeast. During the Industrial Revolution, it was considered a "high technology" industry and was located in the Northeast where the pace of innovations in machinery was rapid. By the 1880's, the manufacturing process had become standardized, permitting its relocation. "By 1920, over 70 percent of the . . . yarn produced in the United States was made in the South, compared to 30 percent in 1880."[24] This same process can be seen in today's advanced technology industries, such as computers, where "new product development and highly skilled production . . . are located in the Northeast and California. Plants outside . . . manufacture high volume components and sub assemblies."[25]

It is evident that South Carolina is still a recipient of these mature production processes for manufacturing. While such facilities do create employment, fewer skilled positions are available, particularly for professional and technical people. This situation may be a contributing factor to the state's persistently low per capita income. While South Carolina has indeed made progress in this respect over the years, its per capita income ranked it #49 in the nation during 1981 (only Mississippi ranked lower).

How Much Has Manufacturing Employment Contributed to the States Overall Employment Gains?

As also mentioned earlier, the visibility of a new manufacturing facility tends to enlarge the public's perception of manufacturing's contributions to the state's total employment. However, Table 3 indicates that South Carolina's growth in total manufacturing employment between 1968 and 1978 was about the same as for the Southeast as a whole. New industrial facilities contributed only 13.7 percent of the state's total employment growth during the 1970's, with manufacturing facilities from the Mid-Atlantic states contributing only 3.1 percent of the growth.

> In short, a substantially large proportion, 86 percent, of total employment gains . . . was due to the gradual, largely unheralded expansion of existing manufacturing firms and to the growth in the nonindustrial sectors of the South Carolina economy.[26]

For example, employment in wholesale and retail trade grew 29.0 percent and 27.8 percent, respectively, 1975-'81; while finance, insurance, and real estate employment grew 24.6 percent.[27]

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[20]Raymond M. Urquhart, **Economically Distressed Counties in South Carolina — Ready for a New Decade?** (Columbia: SC, Office of the Governor, CETA Division, August 1981), p. 5.

[21]Reginald Stuart, "South's Big Boom Years Seem to be Coming to a Close," **New York Times,** March 1982.

[22]See Nancy Grden-Ellson, "Industrial Real Estate in the 1980's," **Business and Economic Review** (November 1981): 27-35.

[23]Hekman and Smith, "Behind the Sunbelt's Growth," p. 7.

[24]John Hekman, "The Future of High Technology Industry in New England: A Case Study of Computers," **The New England Economic Review** (January/February 1980): 7.

[25]Hekman and Smith, "Behind the Sunbelt's Growth," p. 7.

[26]Matthews and McKenzie, "New Plant and Employment Gains," p. 34.

[27]U.S., Department of Commerce, Bureau of Economic Analysis, Washington, D.C. (1982).

It can be argued persuasively that other sectors of the state's economy grew as a **result** of the growth in manufacturing. Industry has a direct impact on the state through the creation of income and employment, and it "spins-off" indirect impacts as this income is circulated through the state's economy, creating demand for other goods and services and, thus, for other employment opportunities.

However, it can be argued just as persuasively that traditionally manufacturing activity will influence the nation's economy to a lesser degree than previously.

> Lunch-bucket, factory America is disappearing rapidly, giving way to an economy increasingly dominated by high technology and service jobs. Not since industry supplanted agriculture more than a century ago has there been such a change in the workplace.[28]

Several industrial states have already begun to diversify away from manufacturing. These same states were less severely affected by the current recession's unemployment rates.

LOOKING TO THE FUTURE

There is no doubt that South Carolina has begun to achieve its industrial goals. However, for the reasons mentioned above, it may be time to try to achieve those goals through additional approaches. Several possibilities exist.

Encourage the Location of Nontraditional Manufacturing Activities

South Carolina must attract high technology manufacturing facilities, as well as research and development operations. It has some locational advantages — the State Technical Education System (TEC), major universities, and a proposed State Research Authority and research parks.

"Grow Our Own" Firms

Some states, apparently "weary of trying to attract jobs from other states, have decided to grow their own."[29] Several states have established quasi-public venture capital operations to assist businesses of all types with "start-up" capital, while others have simply assisted businesses in locating private sources of funds. Other states have enacted enterprise zone legislation, similar to that proposed by the Reagan Administration, which encourage the establishment of new business in economically depressed rural and urban communities.

Encourage the Growth of Small Businesses

In 1980, 58 percent of all jobs in the Southeast resulted from small businesses, and their impact on the region is growing.[30] However, a recent Inc. study ranked South Carolina #48 for its small business climate.[31]

Encourage Expansions of Existing Manufacturing Facilities

The significance of plant expansions has been demonstrated above. Less emphasis usually is placed on existing firms, because industrial development specialists often feel that such acticity is not within their purview and is a profit/loss decision of the firms' management. That attitude needs to be reconsidered. As South Carolina's manufacturing base does become diversified, expansion opportunities will be more available than when the economy was dominated by only a few industries.

This approach may also be useful for achieving the state's rural development goals, particularly since 55 percent of South Carolina based plants are located outside of major metropolitan areas. In Kentucky, for example, development of that state's own manufacturing and service establishments is believed to be a more effective way to create employment in rural counties than the attraction of branch plants from out-of-state.[32]

In conclusion, South Carolina does indeed deserve a "pat on the back" for its industrial development efforts to date, although its actual strides may not be as great as publicly perceived — nor may they be as great in the future. It is doubtful that South Carolina can duplicate its track record over the decade ahead due to national economic forces, as well as its own success. Instead, new approaches will be required to spur the economic development momentum already in place.

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[28]Thomas W. Lippman, "Twilight of the God of the Forge," **Washington Post** 25 July 1982, p. 1.

[29]William Baldwin, "City Hall Discovers Venture Capital," **Forbes** (16 February 1981): 90 and 91.

[30]David Avery, "Small Business: Linchpin for the Southeast?" **Economic Review** (July 1982): 30.

[31]Kuldarshan Padda, "Report Card on the States," **Inc.** (October 1981).

[32]Douglas P. Dotterweich, "Appalachian Entrepreneurship and Industrial Development," **Kentucky Economy Review and Perspective** (June 1982): 10-12.

Checklist For Planning and Executing A Facilities Expansion Program

By James M. Black

(These suggestions on how to plan new plant locations, or the relocation of old ones, are based on the advice of experts, especially that of J. Carl Clamp, in his article "We Know Where We're Going, or, How to Plan and Execute a Facilities Expansion Program" in the April 1982 issue of this publication.)

1. **Make sure you check the educational facilities of both the state and the community where you are considering locating a plant.** The technical schools of some states are quite capable of providing employees (or potential employees) with the training required to perform immediate or future assignments. Nearby colleges and high schools assure you of qualified job applicants and proper educational opportunities for the children of your personnel. They can be a major factor in keeping down labor turnover. ☑

2. **Don't be overly influenced by tax inducements.** A tax free concession is no bargain if you've moved to a location where you lack the labor force to operate your business properly, the transportation system to ship your goods to market, and the schools to educate employees and their children. Your concern should be not what you pay in taxes but what you get in return. You want a good community atmosphere, public acceptance, and cooperation in the attainment of goals that are mutually rewarding. These things are far more important than temporary tax concessions. They are worth paying for and they last. ☑

3. **Be discreet in preliminary investigations.** Keep a lid on what you are doing until you are sure you are ready for media stories about the possibility of a new plant in the community. It is usually good judgment not to take local organizations or politicians too much into your confidence in the early stages of your investigation. This statement does not apply to development boards or similar organizations: they know the importance of treating confidential information confidentially. Executives and elective officers of some civic organizations, media representatives, and the like, however, are anxious to announce "good news" even when it is only a remote possibility, and a new plant in town is definitely "Good News!" ☑

4. States, cities, and counties throughout America have a deep interest in industrial expansion. It means more money and more jobs. But **do not be overly persuaded by enthusiasts from chambers of commerce, utilities, banks, or development boards when deciding a new plant location.** You must first determine in what general area the expansion of your operation is needed, and where in this general area to locate a plant. The decision should be based on objective facts, not enthusiastic sales pitches. Consultants can be helpful in supplying you with information. Development boards can also be of assistance. But — the final decision is up to management, and that responsibility cannot be shifted to anyone else. ☑

5. **The fact that you can buy land at relatively low cost** is an argument that is sometimes used by local industrial recruiters. It **has little weight.** Your immediate concern is not the answer to the question "What is the cost of the land in this community?" Instead, you want answers to such questions as, "How close are we to our markets?" "How close are we to raw material?" "What is the

cost of the power the utility furnishes?" "How effective is its service?" "What about zoning?" "What about waste disposal?" "What about transportation?" If the answers to these questions are the right ones, then it is time to start thinking about the cost of land. ☑

6. **Don't count on importing a large percentage of your personnel.** You will have to go with what's there. So — carefully investigate the available labor force. Is it adaptable to your needs? Is it trainable? What institutions are close by to help you with your training job? How well are they qualified? What about race relations? What about organized labor? Remember that you must depend on the local labor force. If it cannot do the job, neither can you. It is important to be sure that your future employees have the potential ability to build a future for themselves and for your company in its new home. ☑

7. **The main objective of corporate activity is to service the economic community as a whole.** In making expansion plans, wise management strives to build and operate plants that (a) are profitable and compatable with realistic ecological requirements and (b) will stay operationally competitive for their normal economic life span in locations selected for the site of the particular operations involved. Therefore, in making decisions about locating new plants, management must keep the big picture in mind and base its decision on what to do about a particular site on objective facts and within the framework of other decisions regarding corporate activity as a whole. ☑

8. **Before deciding on a site for relocation or plant expansion, examine the long-term returns from natural advantages instead of any short-run or immediate gains from artificial concessions.** Club memberships, rent-free premises, and free utilities are all very well. Never let such inducements, however, trap you into building a plant that is likely to be a money loser. Such a move will not help anybody — your company, which is stuck with a dollar drainer it will eventually have to close down; your stockholders, whose investments will take a tumble; or the community itself: it will have an abandoned building on its hands and a harder job than ever of attracting other industries in the future. ☑

9. **Make a thorough analysis of available community site studies and industry feasibility surveys.** These can be of help **if** they are objective and consider the minuses, as well as the pluses, of a community. Too many communities, overly eager to sell to a prospective buyer, develop studies that stress only their advantages, and these a company usually knows about already. A community should also be aware of its shortcomings as a possible home for a new industry, face them honestly, and try to correct them. The buyer must know the pros and cons of a situation to make a sound decision: it may be a disaster for them not to know. One expert on community site and industry feasibility studies advises, "Hire the consultant who did the job for the city. He knows the area thoroughly, and this time he'll be working for you." The report he'll give you will be factual, objective, and realistic. ☑

10. **Be sure you understand the attitudes of the community.** The 1960's and 1970's provided us with what is called the counter culture, and the 1980's are witnessing the growth of a new liberal group that is simply philosophically opposed to industry and its activities. This latter group is constantly on the attack and will use any available weapon to prevent a plant from locating, or expanding in a community. Through the legislators and officials these people control, they have succeeded in establishing unrealistic regulatory practices and disproportionately high tax rates for industry in towns, cities, and even in some states. Senator Henry Jackson has warned that these environmental extremists are a threat to the nation, and that because of their activities, "the United States is in danger of becoming a technological Appalachia." This group is a major reason why it is so important to be familiar with community attitudes. Management should place its new plants in locations where they will be accepted and where they can expect cooperation and good will. ☑

The Management Bookshelf

By Dwight Gardner, Business Librarian, M.B.A., M.S.L.S.

The Management Bookshelf is a service to our readers provided by the Elliott White Springs Library of the College of Business Administration of The University of South Carolina.

FOREIGN MARKET ENTRY STRATEGIES
by Franklin Root
AMACOM
135 W. 50th St.
New York, NY 10020
1982, 303 pp., $24.95
Root focuses on the three basic decisions confronting company managers seeking opportunities in the global marketplace: how to decide which foreign markets to enter, if any; how to decide on the form of foreign market entry: exporting, investment, or licensing; and how to decide on a foreign marketing plan, i.e., which product, price, channel, and promotional strategy to utilize.

THE CHANGING WORLD OF THE EXECUTIVE
by Peter Drucker
Times Books
3 Park Ave.
New York, NY 10016
1982, 271 pp., $16.95
This book is a collection of seven years' worth of Drucker's essays, many of which originally appeared in the editorial pages of the **Wall Street Journal.** Here he examines a wide range of timely topics, such as changes in workers and the workplace, the need for stronger management training, measuring business performance, and the negative effects of short-sighted planning. Much of the author's analysis is also relevant for nonprofit organizations.

GAINING ON THE MARKET: YOUR COMPLETE GUIDE TO INVESTMENT STRATEGY
by Charles Rolo
Little, Brown & Co.
34 Beacon St.
Boston, Mass. 02160
1982, 299 pp., $14.95
Rolo offers help for the investor in selecting and implementing a profitable investment strategy designed to secure the most favorable rate of return balanced against reasonable risks. He analyzes such investment opportunities as corporate securities, stock options, precious metals, and mutual funds, and explains how to decipher a company annual report and find the financial facts and economic data needed to research a potential investment.

PERSONAL COMPUTERS: HOME, PROFESSIONAL AND SMALL BUSINESS APPLICATIONS (2nd edition)
by D. McGlynn
John Wiley & Sons, Inc.
605 Third Ave.
New York, NY 10016
1982, 368 pp., $12.50 Paper
This volume is a newly revised guide to the operating features, capabilities, and limitations of personal computers. It contains descriptions of the commercially available software and explanations of programming languages such as APL and BASIC. It covers computer hardware in detail, with photos, charts, and tables that list and compare equipment; and contains a directory of retail stores, manufacturers, and suppliers in the United States and abroad.

BLACK MANAGER: MAKING IT IN THE CORPORATE WORLD
by Floyd Dickens, Jr. and Jaqueline Dickens
AMACOM
1982, 325 pp., $17.95
This book is designed to help black managers cope with their special business problems and to overcome racial barriers to their success in the corporate world. The authors have formulated a four-phase developmental career model for the successful black manager, based on their own experiences and research: entry, adjustment, planned growth, and success. White managers may also benefit from reading this book by gaining a better understanding of the problems of their black colleagues.

* * *

Readers are invited to submit titles of books that they wish to call to the attention of others.

STATISTICAL INDICATORS OF SOUTH CAROLINA BUSINESS

ITEMS	July 1982	July 1981	Latest Month Percentage Change from Year Ago
Deposits, Member Banks ($ millions)	$ 6,875.4	$ 5,548.4	+ 23.9
Demand	3,018.5	2,334.0	+ 29.3
Time	3,856.9	3,214.4	+ 20.0
Loans, Member Banks ($ millions)	b	b	—
Savings in Savings and Loan Associations ($ millions)	5,947.3	5,667.1	+ 4.9
Sales and Use Tax Collections ($ thousands)	68,634.1	64,603.7	+ 6.2
Labor Market:			
Civilian Labor Force (thousands)	1,492.2	1,443.2	+ 3.4
Employment	1,317.0	1,317.7	a
Rate of Unemployment (percentage)	11.7	8.7	+ 34.5
Nonfarm Wage and Salary Employment (in thousands)	1,160.1	1,194.6	- 2.9
Manufacturing	354.5	388.2	- 8.7
Contract Construction	66.8	74.6	- 10.5
Transportation and Public Utilities	54.6	54.0	+ 1.1
Wholesale and Retail Trade	239.0	235.8	+ 1.4
Finance, Insurance, and Real Estate	52.7	50.9	+ 3.5
Services, Mining, and Miscellaneous	176.7	171.5	+ 3.0
Government	215.8	219.6	- 1.7
Average Hourly Earnings, All Manufacturing (in dollars)	$ 6.73	$ 6.18	+ 8.9
Initial Unemployment Claims Filed in South Carolina	91,457	40,616	+125.2
Placements by South Carolina Employment Offices (nonagricultural)	6,386	7,785	- 18.0
Indexes of Prices Received by Farmers (1977=100)			
All Farm Products	127	126	+ .8
All Crops	154	156	- 1.3
Livestock and Products	91	87	+ 4.6
S.C. Parity Ratio	81	84	- 3.6
New Motor Vehicle Registrations			
Cars	7,033	8,829	- 20.3
Trucks	2,071	2,357	- 12.1

	July 1982	July 1981	First 7 Months 1982	First 7 Months 1981	Percentage Change
Valuation of Building Permits Issued ($ millions)					
Total for all S.C. Counties	$138.1	$166.1	$1,121.4	$974.7	+ 15.1
Available County Data					
Aiken	1.4	1.8	21.1	19.3	+ 9.3
Berkeley	2.9	1.7	22.8	20.6	+ 10.7
Charleston	13.3	23.2	153.8	130.0	+ 18.3
Dorchester	1.3	1.5	20.4	16.7	+ 22.2
Lexington	9.6	6.2	48.5	30.6	+ 58.5
Richland	10.1	25.1	84.2	86.9	- 3.1
Greenville	27.6	14.3	124.6	96.4	+ 29.3
Pickens	1.5	6.0	10.2	21.1	- 51.7
Spartanburg	5.7	15.9	41.6	81.8	- 49.1

[a]Less than one-half of 1 percent.

[b]Not available.

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DIVISION OF RESEARCH ■ COLLEGE OF BUSINESS ADMINISTRATION ■ THE UNIVERSITY OF SOUTH CAROLINA

South Carolina: International Trader

Volume XXIX, Number 3
December 1982

"South Carolina and the World Economy: An Introduction"
by William R. Folks, Jr.

"Corporate Strategy Recommendations to Enhance the International Competitiveness of the United States Textile Mill Products Industry"
by Brian Toyne, Jeffrey S. Arpan, David A. Ricks, and Terence A. Shimp

"How the 'Hit 'Em Where They Ain't' Strategy Works in the International Banking Market"
by W. David Sweatt

"The Employer and Employment Laws"
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"Bottom Lines"
by James B. Edwards

"The Columbia Port of Entry"
by Robert J. Kuhne and J. R. Steigerwald

"South Carolina As a Location For Foreign Direct Investment"
by Paul F. Foerster

"The Impact of Foreign Direct Investment in Spartanburg"
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"The Management Bookshelf"
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Statistical Indicators of South Carolina Business

Summary of Contents

3 In **South Carolina and the World Economy: An Introduction,** Dr. William G. Folks, Jr., Program Director of International Business at The University of South Carolina, introduces this special issue on South Carolina's "direct and extensive involvement in the global economy."

4 **Corporate Strategy Recommendations to Enhance the International Competitiveness of the United States Textile Mill Products Industry.** This article by Drs. Brian Toyne, Jeffrey S. Arpan, David A. Ricks, and Terence A. Shimp is a brief summary of the findings and corporate strategy recommendations of a 12-month study on the international competitiveness of the United States textile mill products industry conducted by the USC College of Business Administration's Center for Industry Policy and Strategy.

10 Boston Braves legendary shortstop Rabbit Moranville developed a formula for a great batting average: "Hit 'Em Where They Ain't." South Carolina's famous Revolutionary War leader Francis Marion applied the same formula to his military methods with equal success. Here, W. David Sweatt, Vice-President and Manager of the International Department of the First National Bank of South Carolina, tells **How the "Hit 'Em Where They Ain't" Strategy Works in the International Banking Market** for FNB.

14 **The Employer and Employment Laws,** a regular feature by James J. Baldwin, Partner in the law firm of Haynsworth, Baldwin, Miles, Johnson, Greaves and Edwards. In **Resigning From a Union Can Be Difficult — The Hidden Costs,** Baldwin discusses the intricacies an employee may face if he or she attempts to resign from a union.

16 **Bottom Lines,** a regular feature by Dr. James B. Edwards, Professor of Accounting and expert consultant to Management. This month's offering is devoted to **South Carolina Tax Lines,** highlighting some of the income tax items that are treated differently in federal and South Carolina requirements.

22 In **The Columbia Port of Entry,** Dr. Robert J. Kühne, Director of USC BA's Master's in International Business Studies Program, and J. R. Steigerwald, Economic Development Planner for the Central Midlands Regional Planning Council, project the possible impact of Columbia's upcoming Port of Entry on local businesses and the community.

24 Dr. Paul F. Foerster, Executive Vice-President of Operations and a member of the Executive Committee of Hoechst Fibers Industries, believes "the future is in the Palmetto State." In **South Carolina As a Location For Foreign Direct Investment,** he tells why.

29 Has "Spartanburg . . . emerged as America's most international city"? Dr. David A. Ricks considers this in **The Impact of Foreign Direct Investment in Spartanburg.**

35 **The Management Bookshelf,** a regular feature in which Dwight Gardner, USC BA's Business Librarian, reviews books of interest to business practitioners.

36 **Statistical Indicators of South Carolina Business.** A regular feature, listing the latest available data.

business and economic review

Vol. XXIX, No. 3 **December 1982**

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Published in Oct., Nov., Dec., March, April, and May by The University of South Carolina as a service for those interested in business and economic matters.

This month's cover. What, besides a Carolina moon, do Francis Marion and the First National Bank of South Carolina have in common? For the answer, see FNB Vice-President W. David Sweatt's article on p. 10, this issue.

South Carolina and the World Economy: An Introduction

By William R. Folks, Jr.

The direct and extensive involvement of South Carolina in the global economy is a new and dynamic aspect of that state's rapidly industrializing economic structure. It is also a proper return to South Carolina's traditional stature as a leading international trader. Just as Palmetto State indigo, rice, and cotton were shipped the world over in the 18th and 19th centuries, now new South Carolina products are flowing from Charleston and other ports to all corners of the earth.

This special international issue of the **Business and Economic Review** features five articles devoted primarily to providing readers with an appreciation of the intense involvement of South Carolina in the international economy. Brian Toyne, Jeffrey S. Arpan, David A. Ricks, and Terence A. Shimp present a look at the international strategies pursued by firms in the textile mill products industry. Based on a study conducted under the auspices of The University of South Carolina's Center for Industry Policy and Strategy (CIPS), this article incorporates the contributions of scholars from the United States, Asia, and Europe. It also provides some critical insights into the key strategical alternatives of South Carolina's largest employment generator, and into the strategy followed by its offshore competitors. The textile mill products industry clearly must compete in a truly global marketplace, and Drs. Toyne, Arpan, Ricks, and Shimp outline the difficult and potentially painful redirection facing this key South Carolina industry.

The emergence of South Carolina as a major trading state has called forth a concomitant growth in the services needed to support international trade. Paramount among these is trade finance. W. David Sweatt explains how First National Bank's international strategy has evolved to take advantage of the need for international banking services in this region, and how his bank has avoided many of the pitfalls normally associated with this fiercely competitive field.

International trade also needs facilities. How Columbia, over 100 miles inland, will soon become a port, and the advantages to Midlands exporters and importers arising from this development, is the subject of the third article, by Robert J. Kühne, Director of USC's Masters in International Business Studies (MIBS) Program.

South Carolina has been a leading recipient of direct investment by foreign multinationals. Such activity has provided substantial diversification to this state's industrial base, created additional employment opportunities for South Carolina's citizens, and fueled its unparalleled growth. One of the earliest major direct investments was Hoechst Fibers Industries, a subsidiary of the German chemical giant Hoechst. Paul Foerster, Hoechst Fibers Industries, Executive Vice-President of Operations, looks at the favorable investment climate that prompted his firm's interest in South Carolina, and reviews the progress his firm has made since its early days in Spartanburg.

In a companion piece, David Ricks of USC's International Business faculty reports the results

Dr. William R. Folks, Jr. is Professor of Business Administration and Program Director of International Business in the College of Business Administration at The University of South Carolina. He received an A.B. Degree in Mathematics cum laude in 1966 and a D.B.A. Degree in Decision and Control in 1970, both from Harvard University. As Program Director of International Business, Dr. Folks is responsible for all academic programs and faculty in International Business at The University of South Carolina, including the Master's in International Business Studies (MIBS), the largest program in International Business at a nationally accredited business school. He is the author of over 30 papers, articles, and monographs in international finance, with special emphasis on the impact of foreign exchange rate changes on the financial operations of multinational enterprises. He is the coauthor of a study on the impact of Statement of Financial Accounting Standards No. 8 on corporate exchange risk management practices of United States multinationals. Commissioned by the Financial Accounting Standards Board, this research in part led to that board's decision to reconsider this standard. Dr. Folks has also served as a consultant to such companies as Levi Strauss and Brown Brothers Harriman.

of his research into the impact foreign direct investment has had on the Spartanburg area. According to Dr. Ricks, Spartanburg early developed a strategy of actively seeking foreign direct investors, and now may well be "America's most international city."

The University of South Carolina has also benefited from the increasing involvement of this state in the global economy. With the percipience and initiative of James F. Kane, Dean of USC's College of Business Administration, MIBS Program was initiated in 1974 to provide for the managerial needs of this state's internationally-oriented firms. Today, MIBS is the nation's largest AACSB accredited graduate degree in international business, boasting well over 200 students from the United States and 20 foreign countries.

As a native South Carolinian, I am deeply gratified to see the positive impact foreign investment and trade have had on this state. The challenge to South Carolina's political and business leaders for the remainder of this century will be to continue to derive the benefits of enhanced investment, productivity, and employment, while easing the dislocations that sometimes occur during periods of dynamic change. With a tradition of strong and internationally-minded leadership and a deeply engrained ethic of hard work and fair play, South Carolinians can, I believe, cast aside the xenophobic murmurings of the misinformed and look forward to deriving a materially and culturally enhanced standard of living from its international activities.

Corporate Strategy Recommendations to Enhance the International Competitiveness of the United States Textile Mill Products Industry

By Brian Toyne, Jeffrey S. Arpan, David A. Ricks, and Terence A. Shimp

The Center for Industry Policy and Strategy (CIPS) at The University of South Carolina recently completed a 12-month study on the international competitiveness of the United States textile mill products (TMP) industry. The purpose of the study was to determine what corporate strategies are required to meet successfully the international challenges of the 1980's and beyond. This article is a brief summary of the findings and corporate strategy recommendations presented to TMP company executives at a national conference held in South Carolina November 18.[1]

[1]At the time of this writing, conference participants include members of the international research team; U.S. Trade Ambassador William E. Brock; R. Thomas Cummings, Chairman, Executive Committee, Man-Made Fibers Producers Association; Leo Feuer, Chairman, American Apparel Manufacturers Association; James Martin, Vice-President, American Textile Manufacturers Institute; and Frank Mitchener, Chairman, National Cotton Council. Copies of the report, The United States Textile Mill Products Industry: Challenges and Strategies for the 1980's and Beyond (Division of Research, College of Business Administration, The University of South Carolina), will be available in the early part of 1983. The study was financed by the James C. Self Foundation, The University of South Carolina-Business Partnership Foundation, and the College of Business Administration, The University of South Carolina.

ENVIRONMENTAL DEVELOPMENTS AFFECTING INTERNATIONAL COMPETITION IN TEXTILES

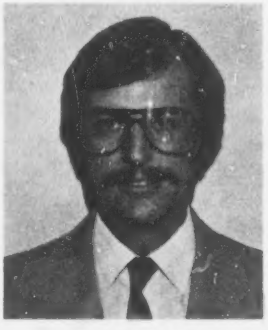
The TMP industries of industrialized and developing countries experienced significant alteration between the 1950's and the 1970's. Responsible for these changes in industrialized countries were five major forces. (1) The formation of the

Dr. Brian Toyne is Associate Professor of International Business and Director of the Center for International Business Studies in the College of Business Administration at The University of South Carolina. He was Project Director of the 12-month study on the international competitiveness of the United States textile mill products industry, and was responsible for the research activities of the 12-man international research team. Dr. Toyne holds a Mechanical Engineering Degree from the Isle of Wight Technical College (England), and B.B.A., M.B.A., and Ph.D. Degrees from Georgia State University. He is coauthor of 2 monographs dealing with the international challenges confronting the United States apparel industry and 1 book **Host Managers of Multinational Firms**; and author or coauthor of over 25 professional articles and papers.

European Community (EC) in the late 1950's dramatically increased intra-European competition. (2) The trade liberalization movements of the 1960's and the 1970's (e.g., Dillon, Kennedy, and Tokyo tariff reduction rounds) stimulated international trade in textiles. (3) The increasingly more sophisticated competition from low-wage developing countries resulted in an increased penetration of European and United States markets by imports. (4) The slowdown in textile consumption in industrialized countries in the 1970's intensified competition. (5) There was increased competition for labor from other indigenous industries.

The industries of the Asia Pacific region, such as those of Japan and Taiwan, also experienced pressures for adjustment as they matured. They encountered stiffening trade barriers, imposed first by the United States and then by European countries; were challenged by lower cost developing countries, such as the Philippines and Indonesia, pursuing their own industrialization and economic goals; and had to compete increasingly for labor with their own indigenous industries.

Dr. Jeffrey S. Arpan is Professor of International Business and Director of the Center for Industry Policy and Strategy in the College of Business Administration at The University of South Carolina. He holds a B.A. Degree in Economics and M.B.A. and D.B.A. Degrees in International Business from Indiana University. He has coauthored 2 books and several articles on the international competitiveness of the United States apparel industry, and a report of the National Academy of Engineering on the impact of technology on the international competitiveness of the United States fiber, textile, and apparel industries. He has also authored 4 other books and several articles on various International Business topics.



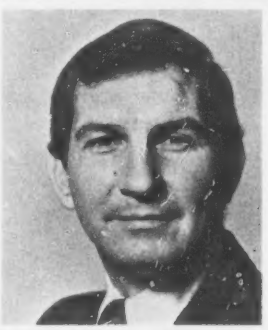
Dr. David A. Ricks is Professor of International Business in the College of Business Administration at The University of South Carolina. He received his D.B.A. Degree in International Business at Indiana University in 1970. Dr. Ricks came to USC from The Ohio State University, where he served as Chairman of the International Business program. He is currently Treasurer of the Academy of International Business, and Project Director of a study of the international competitiveness of the United States man-made fibers industry initiated and administrated by the Center for Industry Policy and Strategy. Dr. Ricks has written 5 books and over 30 articles on International Business subjects.

As a result of these environmental pressures, the international dynamics of competition were affected, and TMP industries experienced growing pressures for (1) political action, (2) structural adjustment, and (3) technological change. Most governments became more actively involved in their TMP industries. While general levels of tariff protection decreased, other forms of trade barriers and government assistance increased. The essential focus in industrialized countries was on policies of higher nontariff protection (e.g., quotas) to reduce employment losses from imports. In addition, many European governments pursued policies designed to encourage the restructuring of their industries into more efficient subsectors of an emerging European industry. The restructuring and rationalization policies also appear to be based on the assumption of eventual trade liberalization in the future, and on the need to transfer resources into higher growth, higher profit industries. In the developing countries, the focus was on the rapid development of man-made fiber, textile mill, and apparel sectors (often accompanied by import substitution and export development policies) to expand domestic employment and generate export earnings.

The development and international spread of new technology accelerated rapidly, primarily in the form of textile manufacturing equipment (e.g., equipment for yarn and fabric forming, dyeing, printing, and finishing) and fiber combinations. These technological innovations were aimed at increasing productivity and productive versatility, and resulted in increased capital intensity and industry concentration levels in the major industries of Europe, Asia, and the United States.

CORPORATE STRATEGIC RESPONSES TO ENVIRONMENTAL CHANGES

In many cases, TMP companies of Europe, Asia, and the United States also experienced pressures to make fundamental changes in their competitive



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strategies. The strategies adopted by the "progressive" and generally larger TMP companies in the 1960's and the 1970's generally were "national" in character.

The classification of industries in the exhibit following is according to how firms perceive their markets (as homogeneous or heterogeneous) and how many products firms produced to satisfy their market(s). A **homogeneous** perception implies that firms ignore or do not recognize that a market consists of submarkets or segments that have different needs or requirements to be satisfied. Such firms use an **undifferentiated** or **proliferated** strategy, depending on whether they produce one product (e.g., denim) or several products (e.g., denim, shirting, coat lining). These firms tend to be production-oriented, emphasizing production costs, production quality, and price. In contrast, a **heterogeneous** perception implies that firms recognize that their markets are made up of submarkets with differing needs or requirements. Firms with this perception produce products specifically designed to meet submarket needs or requirements and use a **concentrated** or **differentiated** strategy, depending on whether they produce one or several products. These firms tend to be **marketing-oriented,** emphasizing market needs and nonprice competitive factors (e.g., brand, advertising, customer service).

The results of pursuing these four strategy alternatives are quite mixed when measured in terms of the industries' performance and international competitiveness. Of the European countries, West Germany and Italy emerged as the most successful at the close of the 1970's, and France and the United Kingdom as the least successful. Taiwan and Japan also emerged as highly successful international competitors, but for different reasons. Finally, the United States emerged as a successful international competitor without specifically pursuing internationally-oriented strategies (e.g., exporting generally plays a minor role).

The reasons for this variation in industry performance and international competitiveness are

EXHIBIT. Adjustment Strategies of Textile Industries in Europe, Asia, and the United States in the 1960's and the 1970's

Strategies of the 1960's

Homogeneous Market	Heterogeneous Market
Undifferentiated	**Concentrated**
Japan Taiwan United Kingdom (largest firms) United States West Germany (majority of larger firms)	Italy (many firms were shifting to this strategy and away from proliferated or differentiated strategies)
Proliferated	**Differentiated**
United Kingdom France*	Netherlands West Germany (minority of larger firms)

Strategies of the 1970's

Homogeneous Market	Heterogeneous Market
Undifferentiated	**Concentrated**
France (larger firms) Japan (through FDI) Taiwan (plans to shift to a differentiated strategy in the 1980's) United Kingdom (larger firms)	Italy (high value segment)
Proliferated	**Differentiated**
United States (still overshadowed to some extent by an undifferentiated strategy)	Japan (many segments Netherlands (few segments) West Germany United Kingdom (recent shift to a low value segment strategy)

*In the 1960's, France pursued a strategy that emphasized technological superiority.

too many and too complex to be explored fully in this article. However, several of the more significant reasons need to be highlighted to provide the background necessary for understanding the strategies recommended for the United States industry. They include (1) the international scope of each industry's competive environment, (2) the speed at which change occurred in this environment, (3) the strategies selected to cope with this change, and (4) the emphasis placed on particular elements of the selected strategies.

The remainder of this section addresses these major differences in terms of the four strategy alternatives identified in the exhibit following, in order to identify underlying trends that may have significant implications for the international competitiveness of the United States industry in the 1980's.

Production-Oriented Strategies

The undifferentiated strategy (production of standardized fabrics) pursued by West Germany and Japan in the 1960's, by the United Kingdom and Taiwan in both decades, and by France in the 1970's failed to provide international viability for these industries. The United States' undifferentiated strategy succeeded in both decades primarily because of its domestic market size.

The undifferentiated marketing strategy adopted by West Germany, France, and the United Kingdom was unsuccessful because of its inherent inflexibility, the continued emergence of low-cost industries, and an inadequate domestic market base. The European situation in the 1960's and the 1970's required flexibility in production, something that the undifferentiated strategy inherently lacks, in order to adjust simultaneously to the mounting pressures for the rationalization[2] of the EC TMP industry and the rapid changes occurring in man-made fiber and blended fabrics.

The textile industry of Japan, and eventually Taiwan, had to abandon the undifferentiated strategy because of competitive pressures from new emerging low-cost industries and increasing protection by the industrialized countries.

The United States industry is the only industry in an industrial country to emerge from the 1970's with a successful undifferentiated strategy. Yet, it increasingly adopted a new strategy in the late 1970's as a result of domestic competition. However, unlike other industries which increasingly viewed markets as heterogeneous and therefore catered to specific market segment needs and requirements, the United States industry tended to adopt a proliferated strategy that assumed market homogeneity. While this strategy inherently emphasizes productivity, productive versatility, and advanced technology, it usually lacks a marketing orientation, a reason for linkage with other textile-related industries, and an export orientation.

Market-Oriented Strategies

The concentrated and differentiated strategies — finding or creating market segments — provide international viability to those industries adopting them. The differentiated strategies adopted by West Germany in the 1970's, Italy in both decades, and Taiwan for the 1980's, emphasized productive flexibility, advanced technology, a marketing orientation, and a strong export orientation.

The Japanese TMP industry was unique in its development of a strategy that combined with undifferentiated and differentiated strategies through a vertically integrated internationalization process. South Korea is now in the process of adopting a similar strategy. For example, one of Japan's largest fiber companies, Toray Industries, wholly or partially owns numerous textile mill and apparel companies in Japan, South Korea, Taiwan, Hong Kong, Indonesia, Thailand, Malaysia, and Singapore. This strategy emphasizes the international rationalization of production to gain from the lower costs in other emerging industries, productive flexibility, advanced technology, direct linking with other textile sectors (required if internationalization is to be maximized), a marketing orientation, and a strong export orientation.

EMPHASIS PLACED ON VARIOUS ELEMENTS OF THE ADOPTED STRATEGIES

How firms view their markets, and the number of product offerings they manufacture result in their placing differing emphases on technology, production, marketing, and strategic planning. This difference in view directly affects the international competitiveness of the firms. The emphasis placed on these four strategy components is discussed below.

Technology

The four strategies (undifferentiated, proliferated, concentrated, and differentiated) all place con-

[2]The European industries' adjustment in the 1960's and the 1970's resulted in national industries becoming specialized in those sectors of the TMP industry in which they had comparative advantages. The result has been an EC industry with efficient subparts.

siderable emphasis on technology, but for different reasons. The undifferentiated and proliferated strategies emphasize modern and advanced technology in order to increase productivity, fabric quality, and the replacement of increasingly costly labor in the production of standardized fabrics. Since economies of scale are important in the production of standardized products, mills tend to be large, relatively inflexible, dependent on large volume orders, and relatively unresponsive to market changes.

In contrast, the concentrated and differentiated strategies, while seeking the same technological advantages of the undifferentiated and proliferated strategies, place considerably more emphasis on productive flexibility and versatility, and on the development of new fibers and fabrics. Since the fabrics, yarns, and threads are designed to meet the specific demands of market segments, short and more varied production runs result, and smaller mills can be used. The resulting diseconomies of scale in producing these shorter runs generally are offset by premium prices, and/or additional other markets are sought overseas to increase volume.

Production

The United States TMP industry is a recognized world leader in productivity and the lowest-cost producer of textiles among industrialized countries. However, its lead is being challenged by other major industries which are pursuing highly marketing-oriented strategies. This suggests that these strategies may have greater international viability. The viability arises from the need to invest more heavily, not only in modern and advanced technology, but also in manufacturing techniques related to productive flexibility and product diversity. The strategy also appears to stress small-to-medium sized firms which, even in the United States, tend to be the better industry performers.

Marketing

The undifferentiated and proliferated strategies place little emphasis on market needs and changes in these needs. As a result, TMP firms pursuing these strategies tend to be production-oriented, and do not develop an in-depth capability for forecasting demand and changes in demand. More importantly, perhaps, they are not responding to fundamental changes occurring in the international marketplace.

The international marketplace is being divided increasingly into two distinct markets. The first market is for undifferentiated yarns and fabrics, which can only be satisfied with an undifferentiated or mass market strategy. Yet, the comparative advantage for this type of strategy is increasingly with the new emerging industries. They have large pools of low wage labor and ready access to modern production technology. The only way this advantage can be exploited by the high cost industries of Europe, Asia, and the United States is through an internationalization strategy similar to that adopted by Japan (a competitive reaction), or by increased protection of domestic markets (a passive reaction).

The second market is for differentiated yarns and fabrics. It has grown substantially since World War II, and is the direct result of TMP firms seeking to become dominant in particular market segments by satisfying the specific needs of these segments. However, unlike the homogeneous market approaches of the first market, the success requirements for the heterogeneous market approaches include (1) a considerable inhouse capability for forecasting future demand, (2) a sophisticated marketing research activity, and (3) a close, if not direct, cooperative relationship with man-made fiber producers attuned to end-user needs. At the present time, the European, Japanese, and Taiwanese industries have a clear and distinct advantage over the United States industry in this second market in terms of developing these success requirements.

Strategic Planning

Long-range strategic planning (10 years or more) is not practiced by most United States TMP companies, and the United States government has not displayed as vital an interest as some of the other countries in pursuing industry-specific development plans and policies. As a result, the United States TMP industry lacks a vital competitive tool that is being employed increasingly by other industries and by the TMP industries of European and Asia Pacific countries. With an increased emphasis on marketing-oriented strategies, the need for long-term, formal, and systematic planning is increased. The inherently higher risks associated with such strategies increase the need to be aware of long-term domestic and international trends that will ultimately affect specific market segments and how they may impact on short- and intermediate-term plans and objectives of the firm.

IMPLICATIONS FOR THE UNITED STATES INDUSTRY

The United States TMP industry, not involved in the relatively more dynamic international environment, adjusted more slowly to competitive change than did the European and Asian industries. However, because the United States market was large, competitive, and diverse, and because there were many strong TMP companies, the industry entered the 1980's as a recognized world leader in productivity, and is the lowest-cost producer of textiles among industrialized countries.

However, it is not clear that the United States industry's international superiority is sufficient to make it a leading international competitor in the future. The successful European and Asian firms have already adopted market-oriented and export-oriented strategies that emphasize specialization in fibers and fabrics, productive flexibility and versatility, and an in-depth management with skills in such areas as marketing, marketing research, international trade, and international operations. This is not the case for most United States firms. The United States industry's movement toward a specialization strategy is still overshadowed by its historic production-oriented, undifferentiated strategy. The firms also have demonstrated a very strong penchant for the United States market. This pattern suggests that the United States industry will be faced with foreign competition in domestic and overseas markets that is increasingly more specialized and narrow, yet highly sophisticated in meeting the special needs of numerous market segments.

UNITED STATES CORPORATE STRATEGIES FOR THE 1980'S AND BEYOND

With the United States TMP industry facing the environmental and competitive challenges described above, the key question is how to maintain its international viability in the future. While the question is relatively simple and straightforward, the answer is complex and multifaceted. Identified are eight general corporate strategies which appear to be appropriate for increasing the United States industry's ability to compete internationally. These strategy recommendations are not mutually exclusive.

1. **Reevaluate apparel fabric offerings more carefully and frequently, using end-market research and market position techniques.** Domestic apparel output and hence fabric purchases will continue to grow, but more slowly than industrial and home furnishings uses. Also, apparel imports likely will take a larger share of the domestic market. Competition in apparel fabrics, therefore, is anticipated to increase, and success will depend increasingly on sound market-oriented decisions.

2. **Increase focus on foreign markets and operations.** The greatest future growth in demand for apparel fabrics (and perhaps all fabrics combined) is expected to occur **outside** the United States. With the anticipated slower growth in apparel production in the United States new opportunities for exporting United States apparel fabric and establishing fabric production abroad should be considered.

3. **Place increased effort on reducing production costs or enhancing product features.** The reduction of production costs by utilizing new production technology and/or the use of off-shore investments in lower labor cost countries is necessary if we are to compete with the textile industries of developing countries in high volume, low cost fabrics (undifferentiated products). On the other hand, the enhancement of product features (e.g., fabric quality, cleanability, durability, width) allows United States firms to compete on **other than just a price basis,** and in specialized submarkets (a strategy being pursued increasingly by European and Japanese industries).

4. **Increase investment in human capital and working conditions.** Increased investment in new plant and equipment will not increase productivity sufficiently. The ability to attract component employees will require increased attention to the machine-operator interface, the changing needs of employees, and the changing skills required by new processes.

5. **Significantly increase the resources devoted to marketing research and to evaluating market sophistication.** The dynamics of competition and end-use markets are increasingly complex and volatile. New applications for existing fabrics, new fiber combinations, new production technologies, new competitors, and changing customer needs and preferences are constantly opening up new markets and closing others. United States producers of textile mill products must anticipate such changes more effectively if they are to

increase their competitiveness, especially if they adopt an exporting orientation.

6. **Increase emphasis on customer service.** Customer service is a major competitive advantage a firm can possess in domestic markets, particularly over foreign firms. This includes pre-sale and post-sale services.
7. **Initiate joint technology and marketing research efforts with suppliers and customers.** Closer cooperation among firms in the major segments of the United States textile complex would prove mutually beneficial, particularly in the R&D and marketing research areas where this country's firms could reap the greatest returns in international competition.
8. **Implement better strategic planning and management.** Virtually everything discussed in the report has shown the need for a strengthing of strategic planning and management, and that most United States textile mill firms devote insufficient effort to these areas.

CONCLUSION

The United States textile mill products industry, as a whole, has survived a tumultuous decade of increased international competition. However, the decade ahead promises to be even more challenging. In this future environment, competition will increase even further, and there is no guarantee that past strategies will continue to be successful in the future.

The industry can become internationally competitive and grow in total output, even if total employment declines. However, choosing the right strategies and implementing them successfully will not be an easy or painless task. Not only will it require major investment commitments by individual firms now for the future, but it will also require a more cooperative working mode of all groups whose livelihood is intertwined with the textile complex. A more internationally competitive complex is clearly in the best interest of United States society.

How the "Hit 'Em Where They Ain't" Strategy Works in the International Banking Market

By W. David Sweatt

STRATEGY

How does a small, regional bank enter the international banking market today? Very carefully, with a strategy suited to itself and the times.

First National Bank of South Carolina intends to be the preferred South Carolina bank for international transactions. The "Swamp Fox" strategy has been devised to fulfill that intention. (Behind the colorful stories of South Carolina's Revolutionary War hero Brigadier General Francis Marion and his exploits was an imaginative strategy conceived by this home-grown "Swamp Fox" to meet the needs of the times.)

A ridiculous comparison? We think not. Let us review the fundamentals for comparison.

The Swamp Fox defeated exterior forces whose strength exceeded his own in manpower, money, food, and materials of war. Not in one large confrontation, not overnight, but over a period of years. This man who invented modern guerrilla warfare conceived that the final victory would be his if he stuck by his strategy. The Swamp Fox strategy for our international banking efforts is borrowed from this patriotic French Huguenot who has captured South Carolinians' imaginations since 1776.

First National is a small regional bank embroiled in a rough tumble international banking competition — a midget among giants. Hundreds of United States and foreign banks outrank us by any measure of bank size: loans, deposits, shareholders' equity. Like the Swamp Fox, therefore, it is our intention to outthink, outwork, and outlast our competitors over a period of years to earn the position of South Carolina's preferred bank for international transactions.

Depend on People You Know

Marion's first premise was to stick to the land and the people he knew — those "Whig" farmers along the Waccamaw, Pee Dee, Black, Lynches, and Santee Rivers — militiamen who knew every swamp and pine thicket. He drew his loyal troops and supporters only from within the lands he sought to preserve for the cause.

We do the same. Our Bank's focus is on local Palmetto State companies (whether United States or foreign owned) we can get to know and know well. Everything we do is for people we know and trust. Our staff is "home grown" with allegiances here — not "mercenaries" robbed from a bank in who knows where. Our staff is loyal to our own "cause" and dedicated to its success.

Avoid Battles Where the Opposition Has Superior Forces

Skirmishes carefully planned and executed were the Swamp Fox's forte — not large, pitched battles. Why? Lord Cornwallis and the King of England commanded enormous resources. To confront these overwhelming odds in open battle would have had calamitous results: elimination of the very ability of Marion's smaller force to survive and fight another day.

Our bank's skirmishes in the world's credit markets must likewise be carefully selected. We restrict ourselves to well thought out risks that can be executed with good results. Why? A "small" loss at the Bank of America might be $10 million dollars. A loss of that magnitude at First National would devastate that bank's earnings and consume 100 percent of its small International Department's attention for months. Time and pressure would halt all further activities of the bank in its campaign to extend its international services.

Conservative? Yes, if that means surviving in the future. The jittery international financial market of 1982 gives witness to the all-but-forgotten lesson that countries, companies, and banks do fail. Like the Swamp Fox, we could not withstand large losses of the variety surfacing this year at many larger money center banks.

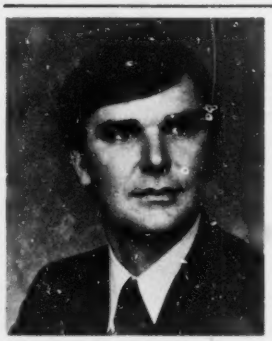
Marketing is solving people's problems with those products you have that meet their needs. We are excellent at handling the standard international transactions that most South Carolina companies require: short-term trade finance and documentation, and foreign exchange. We can outperform banks in New York, Charlotte, Atlanta, or London in these vital aspects of international banking.

The superpowers of international banking, the giant banks, do all manner of things that we cannot or will not do: multicurrency loans; billion dollar syndicated Eurodollar loans to foreign governments, companies, and projects; Eurobond syndications; foreign central bank advising . . . the list is long. We have no strategic or tactical strengths to bring to bear in these areas, so we stay out.

Have Patient Confidence

Francis Marion struggled against the British and the Tories from 1776 to 1782 with his vision of a free South Carolina. He knew that in the end, whenever that was, he would see the last British calvary man board a vessel bound for England. That patient confidence made his tactics bearable — persistence, discipline, commitment to the result. Time after time, Marion overruled his fellow commanders and subordinates who would have had him pursue large-scale assaults on key British strongholds in Georgetown and Camden.

Banking is like that. Strong banks are not made quickly. Excessively fast growth of a bank is a danger sign worldwide. Likewise with international banking: a patient, persistent, disciplined, committed effort creates the desired result. The United States banking landscape of the 1960's and 1970's was littered by the "overnight wonder" international departments of regional banks who went for the perceived "fast buck" in the kinds of



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activities dominated by the world-class, mega-banks. Disaster was the result: loan losses, new management, and a return to the basics.

The siren song of short-term profits beckons in international banking, but it is a call that must be resisted. Real success lies with the patient, disciplined approach.

Develop a Network of Trust

"Networking" is a newspeak term for developing a base of reliable contacts and sources. The Swamp Fox never heard the term, yet he could have invented it. Among the pine forests and up and down the banks of the black water rivers of the Pee Dee, planters and small farmers, loyal to the cause, trusted him. They were his eyes and ears, his storehouse of provisions, and even his source of troops. This loyal network of local people was the quiet bulwark of Marion's fortress without walls. Though he moved warily, he knew who his friends were and reciprocated their trust. While British field commanders and their fellow travelers, the Tories, might plunder the cattle, horses, corn, and salt of the Low Country farmers, Marion would not. Men in his charge were not plunderers, even of the Tories. Many former Tories became militiamen with Marion because of his remarkable fairness and integrity.

A good bank is the same. It depends on a network of trusted and trusting customers who do business with the bank for mutual gain. First National's greatest assets in the development of its international activities is the growing network of people who value their relationship with the bank and earnestly hope for its success. Business in South Carolina is still personal and based on trust. First National has nurtured this climate, and a growing base of loyal international customers continues to be the major provider of new business around the state.

Follow Intuition

Intuition was Marion's secret ingredient. He was poorly educated and untutored in formal military theory, but his tactical instincts were seldom wrong. For his time, the tactics of what we now might call "guerrilla warfare" were unheard of and untried. Military historians today find parallels between Marion's success and that of the Viet Cong in the 1960's. The essence of Marion's genius as a military commander was that he was self-confident enough to filter out the "noise" from fellow American commanders and do what his instincts told him would work in the parishes of the Low Country that was in his charge.

First National's top management has the maturity and self-confidence to trust its own instincts about what it should do in international banking. Amid the noise and claims of larger banks, would-be consultants, and other "experts," First National's course has been devised and executed by its own people, based on their intuition of what South Carolina requires now, and will require in the future, in international banking.

RESULTS: A NEW WAY TO LOOK AT INTERNATIONAL

The unique result is emerging: a different way to look at international within First National and a different way to structure the delivery of international services. What is different? While other regional banks have centralized "all things international" in one single department, we have not. International wire transfers have been integrated into the preexisting domestic bank wire function with superior results. As South Carolina's first S.W.I.F.T. bank, we expect to be the leader in international payments handling.

Foreign exchange is traded in the money management area of our bank, integrating it into the daily consciousness and operations of our people who advise companies on short-term money market investments. Established in this concentration of trading activities, a truly professional foreign exchange trading function is emerging. This approach is "borrowed" from our European banking friends who have always felt that foreign exchange fits with money market investments. Other regional banks tend to have foreign exchange in their international departments, where it may be relegated to a semiclerical function.

Centralization has been the hallmark of international banking in most regional banks in America. "A bank within a bank" is what international departments are sometimes called, guarding their secrets with a veil of mystique about what they do and how they do it.

Our approach has been the opposite. Only those functions that absolutely have to be done by a central international department have been reserved for the International Department in Columbia. Delivery of international services has been placed as close to the customer geographically and operationally as possible, consistent with maintaining quality control. Rather than just having an international department, we are internationalizing the bank itself.

Customer response to this more local availability of international service has been gratifying, and we will continue our practice.

The lesson in all this is not that other banks are "wrong." Rather, it is that our instincts about our own bank, its people, and its potential have led us to very different strategic conclusions about how we might best organize ourselves to achieve the results we seek.

Ability to Maneuver

The Swamp Fox's tactics were fluid, tailored to the exact terrain of his encounters with opponents. Decisive, on the spot actions were his ultimate guarantee of success. We, too, must maneuver with local "commanders" who know the terrain. Our strategy is to respond to international needs in each region of South Carolina with the maximum local control possible.

While other banks are tightly guarding their international resources in one place, we are decentralizing to provide maximum responsiveness. The intention is to secure an advantage locally in every region, to have regional bank officers direct these engagements with adroitness and design.

"Your stuff has to work when the other guy's doesn't." So says a modern infantry commander. This emphasis on local action is designed to insure that "our stuff works" for the companies we serve.

Will to Succeed

The Swamp Fox knew his journey would be long. He resolved that "the cause" he championed would win. It did.

Enormous hostile forces confront us in the international financial world today. First National intends to prevail over these "enemies" to be South Carolina's strongest international bank. We intend to succeed.

"Brigadier General Francis Marion" by Robert Wilson. (This painting originally appeared in **From Savannah to Yorktown: The American Revolution in the South** by Dr. Henry Lumpkin [Columbia, SC: The University of South Carolina Press, 1981], p. 73, Figure 12; and is used here by permission of Dr. Lumpkin.)

The Employer and Employment Laws

By James J. Baldwin, LL.D.

The Employer and Employment Laws is a regular feature. Suggestions and inquiries by readers are invited.

RESIGNING FROM A UNION CAN BE DIFFICULT — THE HIDDEN COSTS

In soliciting new members, unions often use the sales pitch that employees should try the union, and if they don't like it, they can always resign. Yet, there is usually very little explanation given about the procedures, limitations, and costs of such resignations. These limitations are generally of minor concern to most employees until they try to resign during a strike so they can cross a picket line to work. When that occurs, union members often find that resignation can be both difficult and costly.

In a case that has taken more than 8 years to decide, the National Labor Relations Board ("Board") ruled that a union may not impose a blanket restriction on the right of its members to resign during a strike. Specifically, the Board held in **Machinists Local 1327 (Dalmo Victor)**[1] that a provision of a union constitution prohibiting resignations from union membership during a strike or within 14 days preceding the commencement of a strike is an unreasonable restriction on members' right to resign. Most commentators have viewed this decision as one that will make it tougher for unions to maintain rank-and-file discipline during a strike, but a closer look reveals that that may not be the case.

In **Dalmo Victor,** several employees resigned from the union in February 1975 due to economic necessity, and returned to work after being on strike for over eight months. Relying on a constitutional provision prohibiting resignations during a strike, the union fined the employees over $2,000 each for working behind the picket line. The amounts of the fines equaled the amount each employee had received as strike benefits while out on strike. These employees then filed charges with the Board, claiming the fines were unlawful. The Board agreed[2], reasoning that the fines were an unlawful attempt to restrict a former member's post-resignation conduct. On October 10, 1979, the U.S. Court of Appeals for the Ninth Circuit rejected the Board's rationale, refused to enforce the Board's order, and remanded the case for further proceedings.[3]

On remand, after three more years of consideration, the Board changed its reasoning but not the result, and held that the union's constitutional provision was a restriction on a member's right to resign and not an attempt to restrict a former member's post-resignation conduct. While this decision upholds a union member's right to resign from the union during both strike and nonstrike situations, the Board specifically held that a union could impose reasonable limitations on the right to resign as long as such rules were applicable during both strike and non-strike situations. Board Members Fanning and Zimmerman announced that they will find reasonable a rule that a member's resignation shall take effect only upon the expiration of a 30-day period following the tender of such resignation. Chairman Van de Water and Member Hunter expressly rejected the 30-day limitation, while Member Jenkins, who would place no

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[1] **Machinists Local 1327, International Association of Machinists and Aerospace Workers, AFL-CIO, District Lodge 115 (Dalmo Victor),** 263 NLRB No. 141, 111 LRRM 1115 (September 10, 1982).

[2] **Machinists Local 1327, International Association of Machinists and Aerospace Workers, AFL-CIO, District Lodge 115 (Dalmo Victor),** 231 NLRB 719, 96 LRRM 1160 (1977).

[3] **NLRB v. Machinists Local 1327 (Dalmo Victor),** 608 F. 2d 1219, 102 LRRM 2583 (9th Cir. 1979).

restrictions on a union's right to control its members, dissented in the case entirely.

Due to the split decision, the binding effect of this 30-day rule is in doubt, but the mere possibility of its adoption illustrates the predisposition of some Board members to place the rights of unions above the rights of individual employees. At the very least, the proposed 30-day rule would abolish an individual's freedom of choice and give a union unlimited power over its members for a minimum of 30 days. In a typical strike situation, a striking employee could lose his job to a permanent replacement and face possible financial ruin, all within the span of 30 days, because he could not resign from the union, abandon the strike, and return to work.

The Board developed its reasoning in this case from a quartet of Supreme Court decisions beginning with **NLRB v. Allis Chalmers Mfg. Co.,**[4] in which the Court first held that a union could lawfully impose fines on its members who crossed a picket line to work during a strike. In that case, the right to impose such fines lawfully was found to arise out of the contractual relationship between the union and its members. However, two subsequent cases found that once a member resigns, the union's control over the member ceases, and any attempt to collect a fine from that former member is unlawful.[5] In those two cases, the unions' constitutions contained no provisions restricting a member's right to resign, and the Supreme Court expressly left open the question of the extent to which a union-imposed "contractual restriction on a member's right to resign may be limited by the National Labor Relations Act."[6]

The Board noted that addressing this question requires the balancing of two fundamental principles. The first is the statutory right of an employee to refrain from collective activity, including the right to resign from a union.[7] The second is the legitimate interest of a union in protecting the employees it represents who have joined together in collective economic activity. Interestingly, the Board noted that a member's right to resign is not irrevocably lost because an employee joins a union, but it added the caveat that the right to resign is not a right to abandon instantaneously the union and fellow members who exercise their right to strike. Clearly, this statement is a signal of the Board's intention to try to use this ill-conceived balancing test as a means to enhance a union's attempt to preserve solidarity during a strike.

The Board's decision might have been more liberal had it not been for the last of the four cases that provide the backdrop for this decision, **Scofield v. NLRB,**[8] in which the Supreme Court stated that union members must be free to leave a union to escape onerous membership conditions. Nothing in that decision, or subsequent Court decisions, suggests that a member's right to resign could be limited only to periods when a strike is not in progress. Thus, the only clear holding of **Dalmo Victor** is that any rule that limits members' resignations solely to nonstrike periods is unlawful.

Members Fanning and Zimmerman joined the majority and agreed in the results of the **Dalmo Victor** decision, but went further and, contrary to normal procedure in these cases, took it upon themselves to fashion an arbitrary rule regarding the timing of resignations they considered to be reasonable. Claiming that unions are entitled to reasonable notice of the effective date of resignations that occur immediately before or during a strike so the union can protect those employees who have committed themselves to strike, Fanning and Zimmerman formulated the 30-day limit as a general rule to serve as a reasonable accommodation between the members' rights and the union's interests. Their arguments in support of the 30-day rule are unconvincing, and their gratuitous formulation of the rule was immediately attacked by Chairman Van de Water and Member Hunter in their concurring opinion.

Van de Water and Hunter stated that any restriction on union members' right to resign would be unreasonable, and they strongly repudiated the balancing test proposed by Zimmerman and Fanning in formulating their 30-day rule.

> We contend most strongly that the express Section 7 rights of employees are surely more than mere "interests" subject to limitation because their operation somehow impinges on the institutional desires of a union. Conversely, a union's institutional **interests,** to our knowledge, have never been elevated to the point where they stand on equal footing with, and, indeed, override and negate the

[4]338 U.S. 175, 65 LRRM 2449 (1967).

[5]**NLRB v. Granite State Joint Board, Textile Workers Union of America, Local 1029, AFL-CIO (International Paper Box Machine Co.),** 409 U.S. 213, 81 LRRM 2853 (1972); and **Booster Lodge No. 405, International Association of Machinists and Aerospace Workers, AFL-CIO (Boeing Co.) v. NLRB,** 412 U.S. 84, 83 LRRM 2189 (1973).

[6]412 U.S. at 88, 83 LRRM 2189; and 409 U.S. at 217, 81 LRRM 2853.

[7]Member Fanning, however does not endorse the view that Section 7 of the act guarantees employees an independent right to resign from a union. 111 LRRM at 1117, n.14.

[8]**Scofield, et al. v. NLRB,** 394 U.S. 423, 70 LRRM 3105 (1969).

> fundamental protections of, Section 7. Thus, under the banner of "balancing," our colleagues negate for 30 days the express employee protections afforded by one of the act's most important provisions.[9]

Going further, Van de Water and Hunter accused the other two Board members of legislating rather than interpreting the act, as the Board is charged to do, and categorized their choice of a 30-day limit as being nothing more than an arbitrary act of legislative compromise. Indeed, they asked why 10 days is too short a period and why 31 days is too long. Also criticized was the fact that the so-called balancing of rights used to formulate the 30-day rule did not give adequate consideration of the dilemma faced by an employee who initially supports the strike but later undergoes a change of mind because of economic hardship or the fact that his employer has hired permanent replacements to take his job. That employee would be compelled under the 30-day rule to place himself and his family in dire financial straits merely for the sake of a union's interest in strike solidarity.

As noted by Van de Water and Hunter, the real danger presented by the 30-day rule is that it "represents nothing more than an arbitrary compromise on how far a union can unilaterally abrogate individual statutory rights." The 30-day rule, if it were binding, would not only circumscribe an individual's rights, but could also dramatically restrict that person's potential economic livelihood.

The most liberal opinion on this subject was expressed by dissenting Member Jenkins, who found the union's rule prohibiting resignations during a strike a lawful protection of legitimate union interest. Jenkins rationalized his views by stating that these restrictions on members' rights are proper because the members voluntarily join a union and by so doing "freely, knowingly, and expressly agree to such limitations in order to attain the additional strength such a prior commitment gives to the strike as an economic weapon.[10] This statement by Jenkins reveals a certain naivete concerning the practicalities of union membership, and obviously assumed all union members are familiar with the "fine print" obligations of membership.

The **Dalmo Victor** decision illustrates the intricacies that may face an employee who attempts to resign from a union, particularly during a strike. Employees who have never worked in a union plant are not usually aware of these legal difficulties in resigning from a union. For this reason, many employers faced with union organizational attempts exercise their free speech rights to educate their employees on this type of problem so that they can make more informed decisions on whether or not they want a union in their plants.

[9] 111 LRRM at 1122.

[10] 111 LRRM at 1125.

Bottom Lines

By James B. Edwards, Ph.D., C.P.A., C.M.A., C.I.A., C.D.P.

Bottom Lines is a regular feature that brings attention to practical business taxes and accounting. Suggestions and inquiries by readers are invited.

SOUTH CAROLINA TAX LINES

A number of significant differences exist between federal and South Carolina state individual income tax filing requirements. This issue is devoted to highlighting some of the income tax items that are treated differently by South Carolina. The essence of the South Carolina treatment is given.

LINE ONE

South Carolina normally does not recognize current or recent federal tax acts. For example, South Carolina does not recognize the Economic Recovery Act of 1981 or the Tax Equity and Fiscal Responsibility Act of 1982. A change in federal requirements does not automatically mean a change in South Carolina requirements.

LINE TWO

Spouses may file separately on a combined return. Generally, it is advantageous to file separately. If the combined form is used for filing separately, a refund of one spouse may be applied against the tax liability of the other. Spouses are jointly and separately liable.

LINE THREE

To qualify as a "head of household," an individual must claim at least one dependent. A "head of household" must be single. There is no provision for qualifying a widow(er).

LINE FOUR

A personal exemption of $800 is allowed for each taxpayer, spouse, and dependent. Additional $800 exemptions are allowed for age 65, blindness, and "head of household." Part-year residents and nonresidents prorate by percentage South Carolina adjusted gross income to total adjusted gross income. There is no proration caused by death.

The spouse who provided major support must claim the dependent. There is no provision for multiple support. The spouse with the most income is presumed to have provided major support unless proof to the contrary can be established. The dependent must be under 21 years of age, physically or mentally incapable of self-support, or a full-time student. Except for students, the gross income test is $800. There is no requirement for member of household, relative test, citizenship, or residency test. Again, part-year residents and nonresidents prorate by percentage of South Carolina adjusted gross income to total adjusted gross income. There is no proration caused by birth or death.

LINE FIVE

Temporary Reserve and National Guard pay is exempt. Combat pay is excluded the same as federal. There are no other military exclusions, except for amounts contributed for participating in the survivor benefit plan or the retired serviceman's family protection plan.

LINE SIX

Interest from United States obligations and South Carolina state and municipal bonds is not taxable by the state. However, there is no dividend exclusion. A state tax refund is not included in the South Carolina adjusted gross income.

LINE SEVEN

Net operating (business) losses incurred in taxable years ending on or after December 31, 1979, may be carried forward seven years for new businesses or industries, or five years for existing businesses.

Upon the conversion of nonbusiness property to business property, the adjusted cost for depreciating the property converted must be used instead of fair market value or adjusted basis at the time of conversion.

A full deduction for renovation expenses to an existing building or facility owned by a taxpayer incurred in order to permit physically handicapped persons to enter and leave such building or facility, or to have effective use of the accommodations and facilities, is taken in the year the renovation is completed. This deduction is in lieu of depreciation or amortization of the cost of such renovation.

LINE EIGHT

Long-term gains and losses are reduced by 50 percent before they are combined with short-term transactions. There are no loss limitations and no carry-over provisions.

Installment sales are treated the same as federal, with one exception: when a resident moves from South Carolina, the installment sale becomes fully taxable.

LINE NINE

No gain is recognized when property, as a result of its destruction in whole or part, theft, seizure, or requisition or condemnation or threat or eminence thereof, is involuntarily converted into property similar or related in service or use within two years after the close of the first taxable year in which any part of the gain is realized. Losses sustained during the income year on property, if arising from fire, storms, shipwreck, or other casualty or theft, are deductible as ordinary losses to the extent not compensated for by insurance or otherwise.

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BUSINESS AFFILIATES

The Business Affiliates program of The USC-Business Partnership Foundation, chartered in 1977, is designed to attract business investment and participation in the programs of the College of Business Administration. Advantageous to both, this program benefits the business community through better prepared graduates and higher levels of professionalism of employees who participate in the graduate or continuing education programs, and the college through a new sense of relevancy and realism from corporate and business involvement.

Membership funds supplement university appropriations and provide for faculty development, student aid, and program and research support, as well as development of a professional business library within the college. It is the foundation's hope that this will prove to be an ever-expanding partnership program for the college and the business community.

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Mutual Savings & Loan Association of Greenwood
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North Carolina National Bank
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Wellman Industries, Inc.
Westinghouse Educational Foundation
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LINE TEN

No gain or loss is recognized from repossession of property or goods sold unless the sale was made through the taxpayer's normal or ordinary trade or business and such trade or business is on the accrual basis of reporting net incomes.

For casual sales, the basis of the property repossessed is equal to the old basis plus the amount of gain taxes: (the tax from the original sale, if any) less any cash received. For property sold in the course of the taxpayer's normal trade or business, and the taxpayer is on the accrual basis of reporting net income, the new basis may be adjusted in inventory to the lower of cost or market. However, the fair market value should never be less than the amount of the buyer's obligation which is cancelled in order to obtain repossession of the property or the amount for which the property is bid by the repossessor, whichever is higher.

LINE ELEVEN

There is no recapture of depreciation as ordinary income when business assets are sold.

Like-kind exchanges are treated the same as federal except that the property received must have South Carolina situs.

LINE TWELVE

South Carolina does not recognize the over-55 or over-65 exclusions for sale of residence. Deferred gain is recognized provided the new (replacement) residence is acquired and occupied within a period beginning one year prior to the date of sale and ending one year after the date of sale. This applies to purchase or construction of a new residence, and the replacement does not have to be located in South Carolina.

LINE THIRTEEN

The ordinary income portion of lump-sum pension distributions is eligible for a $1,200 pension exclusion, provided the taxpayer is 65 or older. If the ordinary income portion is less than $1,200, the remainder may be applied against the capital gain portion under long-term gains. There is also a special 10-year averaging provision available.

LINE FOURTEEN

Amounts withheld by an employer from an employee's wages for the purchase of an annuity plan cannot be excluded from taxable income, except for employees of the state, its political subdivisions, or state supported schools.

Pension payments from the South Carolina Retirement System and pensions received by police officers or firemen from a municipality or county that has a group plan are exempt. The municipality or county making the payment must be located in South Carolina.

All military retirees with 20 years active service and U.S. Civil Service retirees can exclude up to $1,200 annually. All other taxpayers over 65 (as noted above) can exclude the first $1,200 of a retirement pension or annuity.

Retirement pay from the National Guard or U.S. Armed Forces Reserves is excluded before calculating the $1,200 exclusion. Example: A taxpayer receives a $6,000 pension from the U.S. Army. He has 30 years service, 5 of which are with the Reserves. $1,000 (5/30 times $6,000) is exempt. The remaining $5,000 is eligible for the $1,200 exclusion.

Public school teachers and state employees retirement benefits received from a state other than South Carolina are exempt, provided retirement benefits received by similar persons from South Carolina living in such other states are provided the same treatment by that state.

LINE FIFTEEN

Nonresident beneficiaries who receive income from local trusts must pay South Carolina tax. South Carolina beneficiaries of trusts in other states are taxable to South Carolina on income earned from the trusts unless that state taxes the income. Fiduciary losses are not deductible by beneficiaries.

LINE SIXTEEN

Amounts received as unemployment compensation must be included in gross income without restrictions or limitations.

South Carolina does not recognize income or loss on rental property outside of South Carolina. No expenses related to out-of-state property may be claimed on the South Carolina tax return.

Soil conservation and land clearing expenses are not allowed as a current deductible expense on a South Carolina return.

A Federal tax rebate is considered income. However, only the interest on a refund is treated as income.

South Carolina does not recognize a Subchapter S Corporation.

LINE SEVENTEEN

A maximum of $200 of salary paid by each school district in the state to each teacher is deductible as an adjustment to income.

There is no disability income exclusion except for a taxpayer who is permanently and totally disabled to the extent of qualifying for the homestead exemption under South Carolina laws.

LINE EIGHTEEN

If one spouse itemizes deductions, the other must also itemize. They may itemize even if standard deduction was used on federal return. Part-year residents and nonresidents prorate by percentage South Carolina adjusted gross income to total adjusted gross income as calculated in Part II, Schedule 1001-P. When filing separately, each spouse must claim his or her own itemized deductions. If payment comes from joint funds, they may divide equally or prorate by percentage of each spouse's adjusted gross income to total adjusted gross income.

A standard deduction of 10 percent of adjusted gross income may be claimed instead of itemizing. Such standard deduction is limited to a maximum of $1,000 on a joint return and $500 on all others.

LINE NINETEEN

All medical items are lumped together, and an exclusion of 5 percent of adjusted gross income is permitted.

Auto license, gasoline tax, federal telephone, admissions and transportation tax, and employer's FICA on domestic wages are deductible taxes. Federal income taxes up to $500 are deductible, even on Short Form 1001-A. State income taxes are not deductible.

Contributions are limited to 20 percent of adjusted gross income with an additional deduction of 10 percent if made to churches, educational institutions, hospitals, or medical research organizations located in South Carolina. Donated property is taken at full fair market value on the date of donation, subject to the limitations of 20 percent and 30 percent, above. There is no carry-over except for donation of property adjacent to a South Carolina Scenic River for which a prorata 3-year write-off may be elected.

Casualty loss deductions based on the original cost of the property are deductible in full (no $100 exclusion) in miscellaneous itemized deductions.

Miscellaneous deductions for education are treated the same as federal except that trips abroad are not allowed. Nonbusiness bad debts are treated as miscellaneous itemized deductions. No deductions are allowed if used to earn nontaxable income.

A maximum deduction of $400 per month for child care may be taken as an itemized deduction (not allowed as a credit). This includes children under age 15, disabled dependents, and disabled spouse. Each spouse must be gainfully employed unless one spouse is disabled or a student.

Expenditures made between July 1, 1980, and June 30, 1983, for conservation and renewable energy sources, including wood burning stoves and furnaces, for residential and nonresidential buildings located in South Carolina are deductible — not a credit. Use Form 1001-E. Excess deductions may be carried forward 5 years.

Political contributions are not deductible as itemized deductions or as a tax credit.

LINE TWENTY

An investment tax credit is allowed for purchase and installation of conservation tillage equipment, drip/trickle irrigation systems and related equipment, and dual purpose and crane equipment for purchases made after May 19, 1981. The maximum credit is the lesser of 25 percent of cost or $2,500. Unused credits may be carried forward for five years.

A credit is allowed for payments made by contractors after June 30, 1981, to minority subcontractors for work done pursuant to a state contract. The credit is limited to the lesser of $25,000 or 4 percent of the payments.

There is no earned income credit, credit for Federal Tax on Special Fuels, or credit from a Regulated Investment Company.

BEYOND THE BOTTOM LINE

This presentation is **not complete** in terms of total coverage or depth of relevant details. You must consult with a qualified tax advisor before considering any of the items reported herein. The sole purpose here is to alert you to some possible South Carolina Income Tax considerations.

* * *

Much more to come in the future . . . some practical matters will be explored in depth . . .

others will merely be identified . . . please share your ideas, questions, answers, etc. — just send them to Dr. James B. Edwards, College of Business Administration, The University of South Carolina, Columbia, South Carolina 29208.

The Columbia Port of Entry

By Robert J. Kühne and J. R. Steigerwald[1]

A certified port of Entry for the Columbia Metropolitan Area is expected to open soon at the Columbia Metropolitan Airport. A Port of Entry is a designated geographic area where full-time U.S. Customs Service staff are stationed to handle imports and collect customs duties.

The primary area proposed to be served by the Columbia Port of Entry includes Lexington, Richland, Newberry, and Fairfield Counties. Additional areas to be served are Greenwood, Saluda, Aiken, Orangeburg, Calhoun, Sumter, and Kershaw Counties.

The application for the establishment of a Port of Entry for the Columbia Metropolitan Area was submitted to the U.S. Treasury Department, Bureau of Customs. This application was a result of the combined efforts of the Central Midlands Regional Planning Council, the Committee of 100, the Economic Development Commission, and the Richland-Lexington Airport Commission. A steering committee made up of community leaders, including chief executive officers of banks, industrial plants, and local chambers of commerce, represented the above groups.

The need for a Port of Entry facility was documented by the results of a survey and an analysis of the economic impact of all imports' having to clear customs prior to arrival in Columbia. The results were incorporated in the "Port of Entry Application."

The establishment of a Port of Entry or inland port facility in the Columbia Metropolitan Area will benefit local businesses and the community in several ways. The purpose of this article is to discuss the impact of such a facility on both groups.

REASONS FOR ESTABLISHING A PORT OF ENTRY IN COLUMBIA

There are over 100 importers and more than 200 exporters located in the primary and other counties

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J. R. Steigerwald is the Economic Development Planner for the Central Midlands Regional Planning Council, the research and planning arm of the city and county governments in Richland, Lexington, Newberry, and Fairfield Counties. The region contains 30 municipalities including Columbia, the state's largest city. Steigerwald has been with Central Midlands Regional Planning Council since January 1980. In this capacity, he helped compile the Port of Entry application for the Columbia Metropolitan area which was jointly submitted by the Economic Development Commission, the Richland-Lexington Airport Commission, and the Central Midlands Regional Planning Council. Previous work experience includes 2 years in commercial property management and development in Raleigh, North Carolina. Steigerwald has a B.A. Degree in Interdisciplinary Studies (Urban Studies) and a Master's in Regional Planning Degree with an emphasis in land development from the University of North Carolina, Chapel Hill.

[1]The authors gratefully acknowledge the assistance of John King, a student in the Master's in International Business Studies (MIBS) program at The University of South Carolina, in the preparation of this article.

to be served by the Columbia Port of Entry. Since increased international trade results in the creation of new jobs and capital expenditures, which, in turn, bring higher employment rates and a larger tax base, county and state governments are actively pursuing both new investments and expansions of existing plants.

In an effort to serve these firms more effectively and to encourage additional foreign trade, a survey was conducted to establish the need for a Port of Entry in the Columbia area. Approximately 390 questionnaires were mailed. The list of people to be surveyed was compiled from the **South Carolina Industrial Directory** and the membership roster of the Midlands International Trade Association. Responses to the questionnaire indicated the estimated number of (import) entries, the amount of customs duties paid annually, the ports of entry used, and the extent of international travel by each firm.

Altogether, there were 99 responses, which represents a response rate of 25.4 percent. The respondents reported approximately 6,000 entries and $6,715,658 in duties on imported goods in 1980. All of these imports currently are cleared in other ports of entry, most frequently Charleston (32 percent) and Charlotte (14 percent). The number of reported entries and the amount of duties paid is sufficient to make the Columbia Port of Entry self-supporting, a requirement of the U.S. Customs Service.

The Columbia Port of Entry will be served by access to 3 interstate highways, 4 major national highways, 3 railroads, 2 airlines, and at least 57 trucking firms. Interstate highways I-77, I-20 and I-26 intersect in Columbia. These highways directly connect Columbia with Charleston, Atlanta, Charlotte, and Greenville-Spartanburg. Major highways include U.S. 1, U.S. 321, U.S. 28, and U.S. 378. Eastern and Delta are trunk air carriers serving Columbia Metropolitan Airport. There are over 3 million square feet of warehouse space available to serve the needs of the Port of Entry. Over 900,000 square feet is operated by warehousemen. Another 400,000 square feet of general warehouse space operated by Trammel Crow and Standard Warehouse is located within one mile of the proposed inland port facility.

BENEFITS FOR BUSINESS

Imports

One firm indicated in a letter submitted as part of the application that they dealt with eight different ports to clear their imports to Columbia. It is expensive and time consuming for that company to educate each individual customs inspector as to the appropriate import classification. Instead of having to use several distant ports of entry and a variety of customs inspectors, the Columbia facility will enable importers to clear goods locally and to use the same agent regularly. Costs of sending personnel to other cities to deal with customs issues will be reduced, and classification of goods will be consistent and require less review time. Costs will be significantly reduced.

Use of the Columbia facility will help to reduce breakage and pilferage. Currently, goods must be unloaded in another city for customs clearance, and then repacked for shipment to Columbia. The likelihood of breakage and pilferage is high because of this situation. The local port facility will allow business people to receive containers directly, eliminating the need to repackage and reship.

With full-time customs staff available at Columbia Metropolitan Airport, corporate aircraft from Canada or Mexico will be able to fly directly to Columbia for clearance. Champion Building Machines Company, a Canadian firm, presently can fly directly out of Columbia to its corporate headquarters in Canada. However, on returning, its plane is forced to land elsewhere first in order to clear customs and then to continue on to Columbia. This same type of situation cost Tamper over $37,000 in 1980. The port facility will allow foreign business executives to land directly in Columbia in the near future. This should encourage more investment by foreign firms from Canada and Mexico.

Smaller volume importers will benefit from the new facility by being able to consolidate shipments. Time and money will be saved because consolidated shipments will be sent directly to Columbia.

The presence of customs officials and customs brokers in the Columbia area will make it easier for firms with limited international business expertise to determine the feasibility of entering into international trade. Firms that currently do no importing or exporting will benefit greatly by using the consulting services offered by customs officials. International trade by local firms should increase as the facility's availability becomes known.[2]

[2]Exports mean jobs. Every billion dollars in manufactured exports provides 32,000 jobs for American workers. Exports account for nearly 6 million United States jobs and generate billions of dollars in business for United States companies.

Exports

While the lion's share of the port facility's advantages will be for importers, exporters also will benefit. Currently, upon deciding to export, the Columbia exporter must package the goods and request that an empty container be sent to Columbia from one of the three nearby ports. The container must then be packed and shipped. With the local facility, though, containers used for imports will become available to exporters, thus eliminating the extra time and cost involved in sending out for one. Truckers, too, will benefit since fewer "empties" will have to be transported.

As mentioned above, exporters will be able to use the facility to expand into foreign markets with the information provided by customs officials. Large, diverse markets for products from South Carolina will be more accessible to Columbia businesses.

Many companies in the Central Midlands, both United States and foreign, use components or inputs of foreign origin. The location of plant facilities by these types of firms depends to a large extent on the ability to process and receive imported inputs. Columbia's lack of a port facility has put it at a disadvantage in attracting such industries. Sony, Inc. has announced a decision to build an assembly operation in Columbia. One of the facts positively influencing that decision was the assurance that a Port of Entry would be established here. The Port of Entry in Columbia is important for Sony, which plans to import inputs and export finished products.

The establishment of a port facility is one of the steps necessary before a foreign trade zone can be set up, which allows goods to be produced for export without charging duties. It also paves the way for further high technology (i.e., Sony) investments. In order for South Carolina and especially the Midlands to increase its international trade, business people must use the facility as much as possible. Unless the volume is sufficient to support the customs service staff, the Columbia Metropolitan Area will lose this service. It's up to the business community to make it work.[3]

[3]A limited number of copies of the "Port of Entry Application" are available from the Central Midlands Regional Planning Council in Columbia.

South Carolina As a Location For Foreign Direct Investment

By Paul F. Foerster*

South Carolina has been good to Hoechst Fibers Industries, so I write from the viewpoint of the converted. And at the risk of repeating a claim heard around the world, I offer a single perspective: the future is in the Palmetto State.

But the future will be quite different from the past. Those of us who have watched the state mature and grow in international flavor may have a hand in that future. I hope so, because care must be taken not to lose sight of who we are in becoming what we will be.

The state of South Carolina now attracts foreign industry with its progressive business philosophy, its excellent quality of life, its educational system that stresses technical and vocational training, its diverse and strong trade base, its workforce that believes in the work ethic, and its tradition of fairness and friendliness. As competition for the foreign investment dollar intensifies, there may be temptations to relax emphasis on some of these most basic attributes, perhaps even to allow them to be weakened. But it is in the heat of competition that quality of life, "a day's work for a day's pay," and a diversified industrial base can be the deciding factors for a prospective business. These must be maintained, therefore, if the state is to continue to attract international industries.

Admittedly, these were not the only considerations when Hoechst considered South Carolina for the home of its now 16-year-old Trevira® plant in Spartanburg. We looked first at our market.

Spartanburg was, in our estimation, at or very near the hub of the textile industry. It had an excellent interstate highway system, and easily accessible air, rail, and water (through the port of Charleston) transportation facilities. (A foreign

*The author wishes to thank Donald P. Woodward, Administrator, Personnel and Communications, Hoechst Fibers Industries, for his assistance in researching this article.

trade zone and a port of entry have since been added.) It also offered affordable land, no inventory taxes on manufactured goods warehoused in the state, and a five-year moratorium on some property taxes. The state-supported technical education centers would train workers for our jobs. As my late friend Dick Tukey (former Executive Vice-President of the Spartanburg Area Chamber of Commerce) told **South Carolina Magazine** in 1973, "We don't sell just magnolias and moonlight. We sell economic justification."

Even with all these attractive factors, however, it was considered a major risk by Hoechst executives. In an interview, Kurt Lanz, Deputy Chairman of the Hoechst AG Board of Management, was asked which of the company's projects in the United States was the most risky and exciting. He reflected a moment, then replied, "Without doubt, the Trevira® polyester plant in Spartanburg, South Carolina. For Hoechst it was a jump into the lion's den when the plant started operating in the heart of the American textile industry."

Dr. Paul F. Foerster is Executive Vice-President of Operations and a member of the Executive Committee of Hoechst Fibers Industries, a division of American Hoechst Corporation, Spartanburg. A native of Grevesmuehlen, Germany, he received his doctorate at the University of Greifswald, Germany, in 1955. 1953-'56, Dr. Foerster worked as an assistant in research and development work in polyester fibers at the German Academy of Science. He joined Hoechst AG in Frankfurt in 1956. His first assignment was in the research and development at the Bobingen fiber plant, where he worked in the polyester, nylon, and polypropylene fiber field. Dr. Foerster took over managerial duties in the Bobingen production plant in 1960, and gained experience in the production of polyester filament and nylon 6. In 1965, he joined the Technical Staff Department as an assistant to the management of the fiber division. During this time, he became actively involved in several fiber know-how exchanges on an international basis. He traveled extensively in Europe and to the United States and the Far East. In late 1965, when Hoechst decided to manufacture polyester fibers in the United States, Dr. Foerster became responsible for the coordination of all operational activities for the establishment of the Hystron fiber plant in Spartanburg. In 1966, he was elected to the Board of Hystron Fibers (now Hoechst Fibers Industries), and was appointed Vice-President of Operations. In January 1975, he was promoted to Executive Vice-President of Operations. Dr. Foerster is a member of the Board of Directors of the Spartanburg Area Chamber of Commerce and the Board of Trustees of Mary Black Memorial Hospital in Spartanburg, and has served on the Governor's Advisory Committee on Science and Technology and a USC College of Business Administration program advisory committee. In June 1980, Dr. Foerster received the Cross of the Order of Merit of the Federal Republic of Germany.

In resolving to build a Trevira® plant in America in the mid-1960's, Hoechst's management committed to the largest investment the company had made outside Germany.

But the decision proved a sound one. Marketing of Trevira® has been successful, and the Spartanburg plant has been one of our proudest accomplishments.

Hoechst is not alone in seeing the advantages here. A recent **South Business** magazine article said that more than 25 percent of the state's total investment dollars could be traced to sources from abroad, and that, overall, the state ranked fourth in the nation in foreign capital investments with 187 foreign firms owning plants here. West Germany has voted South Carolina its favorite state by investing more Deutsche marks in the Palmetto State than anywhere else in the country. Governor Dick Riley backs this up, saying that nearly 40 percent of all foreign investment in South Carolina is by German firms.

PERSPECTIVE OF A FOREIGN FIRM

Any discussion of South Carolina as a location for direct international investment should start with the reasons for coming to the United States at all. Dieter zur Loye, President and Chief Executive Officer of American Hoechst Corporation, sums it up with three major advantages: (1) the United States is a highly industrialized nation, conducive to free enterprise; (2) it is the largest single market in the world, with a high standard of living; and (3) it is the most politically stable country in the world, with relatively low probability that a business will be expropriated by the government.

Nicholas Faith, in **The Infiltrators,** described the perspective of a foreign firm moving here to do business:

> They have come to learn . . . they have not come to impose alien patterns, alien products, alien notions of the way business is carried on.
>
> For in the United States, even the biggest European companies behave like small ones. They do not crash into the market . . . for they know they are exploring the biggest, most powerful market in the world, and they are duly respectful of the fact.

Americans like the way foreign firms approach doing business in the United States. They also realize the advantages foreign companies see in having United States capital investments. States, cities, and counties are putting out welcome mats

Georgetown Steel Corporation, Georgetown County, South Carolina, is a major steel manufacturing firm. It is owned by Korf Industries, Inc. (Germany). (Photo courtesy of Santee Cooper.)

to lure new foreign industries with tax incentives, innovative financial packages, and other creative marketing strategies. In addition, these "hunters" know that European companies are willing to pay a premium for American investments, for they look at long-term, lasting profitability rather than a short-term return on investment alone.

This is perhaps South Carolina's strongest attribute in seeking foreign investment. In surveys, South Carolina ranks high on some incentives. Realizing that an international firm is willing to sacrifice short-term return on investment, the state offers its own sacrifices in the form of a five-year exemption on local property taxes. Industrial revenue bonds are also made available.

But the state does not heap the financial incentives so high that a company can become overly dependent on public assistance. Such dependence is precarious, especially now that the public sector is becoming less and less capable of carrying such financial burdens. As Nancy Grden-Ellson wrote in the November 1981 issue of this publication,

> . . . the Palmetto State ranks 35th in financial assistance to industry and 27th in special services for industrial development. Further, it ranks 29th in the types of projects permitted to be financed with industrial revenue bonds.

This shows that South Carolina has not loaded itself up with financial promises it may not be able to keep. Its incentives and concessions have been planned for the long-term, as investment planning is done by European firms.

There are two main ways a foreign company may look at coming into the state. The first is with the intention of building a plant and developing a market. This is both expensive and chancy. But building gives the impression of permanence, which helps a foreign firm acquire trust from its customers and its community. The second method is to buy or lease an existing facility and build up the market in place. This is often less expensive and less risky, in current economic times it often is the only alternative.

Hoechst may be the only foreign investor in South Carolina to have accomplished both. After the Trevira® plant was well established, we bought a film plant in Greer from Celanese a few years ago, and it is now part of the American Hoechst Fibers and Film Group. Employment at the two plants is nearly 3,000 persons. This makes South Carolina home to more Hoechst employees than any other state.

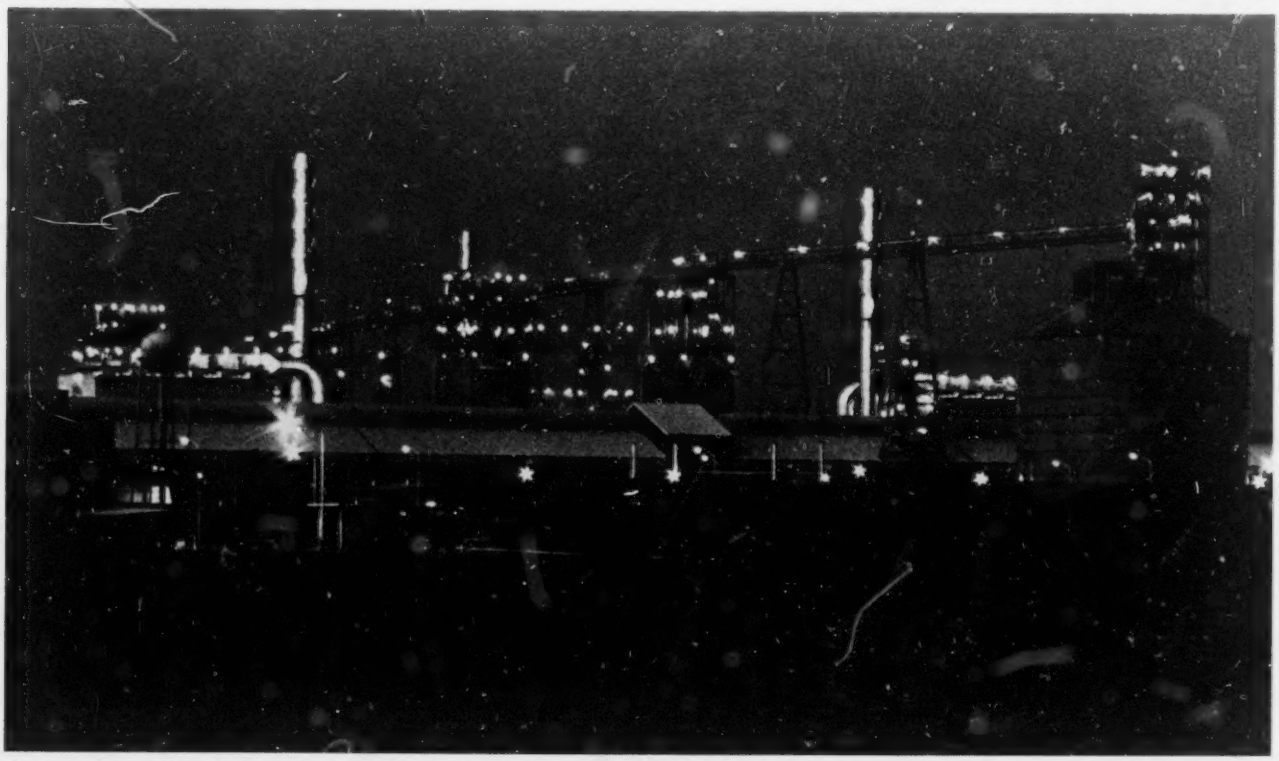
How was Hoechst able to do this? The quality of the workforce is a major contributor to the success of our company's investments. South Carolina has a "right to work" law and an industrial relations climate that makes the employer-employee relationship positive. This, coupled with the state's technical training system, which provides capable and well-trained workers, has allowed our company to prosper.

SPARTANBURG AS AN EXAMPLE

Hoechst has not been a lone beneficiary of the advantages offered by South Carolina and Spartanburg. In fact, 40 percent of all European investment in South Carolina is in Spartanburg. A recently published **Quality of Life** magazine by the Spartanburg Area Chamber of Commerce notes that in the past 10 years, Spartanburg has witnessed a new wave of industrial growth that has brought a variety of manufacturing firms to this area. From wire products to electronics, wood products to large-scale printing firms, fiberglass and plastics, machinery parts to stainless steel containers, Spartanburg's industrial growth has exceeded that of many parts of the nation. Between 1980 and 1982, more than 6,000 new jobs were created in the Spartanburg area. In 1981 alone, 16 firms, including Swiss, Japanese, and Danish companies, announced plans to expand their Spartanburg plants or to locate new ones here. On October 9, when many cities were losing jobs, National Lock Hardware announced the leasing of a former knitting plant with intentions of employing 450 people when in full production.

In some instances chamber officials in Spartanburg encourage a gradual "phasing in" of operations for the potential industrial client. This "formula" consists of working through an established sales/service firm initially. If this proves successful, the foreign investor may establish its own sales/service subsidiary here. In many instances, this is followed by setting up a manufacturing facility. This approach provides considerable protection for the industrial client and the financial backers. The track record in Spartanburg is excellent, and the formula is strongly supported by many financial institutions.

Spartanburg's record of accomplishment can serve as a model for the state. Its most basic component is a warm, friendly political and business climate. South Carolina as a whole has a reputation for being open and friendly to businesses seeking to relocate, without "pushing" the decision. In some states companies are now



Alumax of South Carolina, Inc., Berkeley County, South Carolina, is one of the newest primary aluminum reduction plants in the world. It is owned by AMAX, Inc. (United States) and Mitsui & Co. Ltd. and Nippon Steel Corp. (Japan). (Photo courtesy of Santee Cooper.)

starting to conduct site selections, or at least preliminary appraisals, anonymously to avoid being overpowered. Spartanburg (and South Carolina) development officials are zealous and helpful, but always considerate and gracious.

Industry now established in Spartanburg supports fully the principle of growth. There are, however, concerns about new industrial members moving into the community. These concerns include compatability with existing industries, even though planned variety in growth is the key here. Mrs. Ruth Calvert, General Manager of Economic Development for the Spartanburg Area Chamber of Commerce, reports that Spartanburg has, in the past 30 months, moved away from emphasis on the textile industry and its relatives. Other area cities are following suit. A recent survey in Charlotte, North Carolina recommended computer-related, printing-publishing, biological, and medical products plant development. Michelin's truck tire plant is an example of the planned diversification of local industry brought about by foreign capital.

Spartanburg chamber officials are also paying close attention to changing trends in site selection as pointed out by the 1980 **BusinessWeek** Plant Site Survey. Industrial revenue bond financing has increased substantially in importance, the survey revealed. Officials from the Spartanburg chamber recently spent a week in New York contacting domestic and foreign-based banks to develop innovative financing packages to offer prospective firms.

Local transportation for employees is also increasing as a concern for relocation. Spartanburg County officials are working toward relieving congestion on the interstate system that feeds many of the major industrial sites in this area.

The **BusinessWeek** survey also points to increased concern with the quality of life of employees — adequate recreational and cultural facilities gained 17 percentage points and adequate educational facilities gained 18 percentage points over the same survey of concerns in 1976. While economic development specialists can do little directly to affect these offerings, they can show increased concern, as has been displayed in Spartanburg.

THE "PEOPLE" ASPECT

In 1968, according to **BusinessWeek,** South Carolina ranked 15th among the 50 states and District of Columbia as a preferred plant site. In 1976, it had moved to fourth place, and the 1980 survey ranks South Carolina, Texas, and North Carolina as the most preferred sites.

The Sunbelt is obviously luring its share of new industry, despite the efforts of Northern states to keep and attract new plants. As states in the North "up the ante" in incentives, the South must follow. And many business watchers predict a leveling off of advantage as the South reaches a relative saturation point.

The 1980 report of the Commission on the Future of the South points to this loss of advantage. In the past, it said,

> a Southern location has been able to offer prospective employers lower wage rates, partially offset for the employees by a lower cost of living. But by the end of the 1970's, hourly earnings in manufacturing exceeded the national average in several major industries. Rising income and the higher cost of living signal economic growth in the South, but they also diminish the inducement for coming here. Likewise, cheap and abundant energy supplies are dwindling in the face of new energy-intensive industries built in times of lower energy costs.

In a recent speech, William S. Lee, Chairman of the Board and Chief Executive Officer of Duke Power Company, said, "We cannot have economic development in the Carolinas if electric suppliers cannot recover their costs, including a return that is competitive to investors in the marketplace."

Indeed, additional supplies of electricity will be needed as our growth continues. An end must be put to the present scenario of consumers versus power companies in rancor. Today's energy prices must be adequate to assure tomorrow's supply.

The report from the Commission on the Future of the South adds that

> one major advantage for attracting industry the South has not lost is the quality of its workforce. The work ethic is strong in the region; there is pride in achievement, a willingness to work hard. The working people in the South are a major resource, a resource not to be exploited or displaced, but to be respected and appropriately rewarded.
>
> Indeed, success has seen a flourishing of their better qualities — manners, love of place, closeness to nature, sense of God, sense of history, humor, unpretentiousness. Such intangibles are part of a heritage to be cherished and held to, come what may in the next decade.

Thus, it is extremely important that the South, and South Carolina in particular, keep and upgrade its most important asset: quality of life. And this does not mean "magnolias and moonlight."

Governor Riley, in writing for a German business periodical, described the affinity German businesses have for our state

> . . . there is a common denominator in the character of the German people and that of South Carolinians.
>
> I refer to the basic human quality which drives us to demand productivity and excellence in the workplace, as well as continuing improvement in the quality of our lives in every avenue of endeavor — from business and industry to art, science, and leisure activities . . .
>
> Both peoples have been motivated by a mutually shared desire to improve their quality of life — a desire that has been readily served by economic conditions in and between South Carolina and Germany.

There is no doubt that international investment will continue in South Carolina through the 1990's. This will bring increased demands — on transportation, on preservation of natural resources and renewable energy resources, on inventive fiscal strategy for both private industry and government, and on creativity in the marketplace.

But in the continuing growth, too much emphasis can be placed on the economic. If South Carolina is to remain a strong contender for international capital investment, emphasis on human development must continue to grow as profits do.

Dr. David Matthews, former Secretary of Health, Education and Welfare in the Ford Administration, emphasizes the point

> . . . people are the source of any economic strength . . . The key to our success in the South must be a combination of long-range human development strategies along with long-range economic development strategies.

Indeed, the future success of the South, and particularly South Carolina, will be the result of the strategies designed and implemented today. We, the representatives of "foreign industry," have a real stake in our new home. We stand ready to do our part.

The Impact of Foreign Direct Investment in Spartanburg

By David A. Ricks[1]

Most Americans are more familiar with the South Carolina coast than any other area of the state, but many European business people undoubtedly have heard more about Spartanburg than the Grand Strand, and for a good reason. Of the approximately $70 billion foreign firms have invested in the United States, a disproportionately high $3 billion has poured into South Carolina, and Spartanburg is reported to have attracted about 40 percent of this inflow. What is especially impressive about these figures is that Spartanburg is a city of only about 50,000 people. Therefore, it has probably received more foreign direct investment (FDI) than any other city of its size and ". . . for its size, Spartanburg may now have emerged as America's most international city."[2]

Spartanburg, of course, profits from this investment activity in a number of ways, not the least of which is tax revenue. In fact, one foreign owned firm, Hoechst Fibers, has been credited with paying more tax than the total tax collected in 30 of South Carolina's 46 counties.[3]

[1](For a photo and biographical sketch of the author see p. 5.)

Dr. Ricks would like to thank Dr. Jeffrey S. Arpan, Professor of International Business at The University of South Carolina, for his help with, and support of, this research project. He would also like to acknowledge the financial support provided by The University of South Carolina-Business Partnership Foundation, and the research assistance of Peter Bemelman, USC Master's in International Business Studies class of 1983.

[2]Earl H. Fry, **Financial Invasion of the U.S.A.** (Highstorm, N.J.: McGraw-Hill, 1980), p. 133.

[3]"Oompah in the Bible Belt," **Time**, 25 July 1977, p. 50.

Although foreign investment activity in this area began in the 1960's, most Americans were unaware of it until the 1970's. Switzerland's Rieter Machine Works set up the first foreign owned firm in Spartanburg in 1960. The American Rieter Company, Inc. served as a sales outlet. Shortly thereafter, a second Swiss sales outlet, Sulzer Brothers, Inc. was started in the area. In 1965, Menzel, Inc. arrived as the first foreign owned manufacturer in Spartanburg and was soon followed by Hoechst Fibers. By 1980, 53 foreign owned firms (from 9 different countries) were located in Spartanburg. A breakdown of these firms is reported in Table 1.

The initial inflow of foreign investment drew little attention from people outside of South Carolina. However, by the early 1970's, the volume had become so significant it received both national and international attention. **U.S. News and World Report** was one of the first major national magazines to spotlight the area. Its 1972 story led to other articles, and by 1975, Spartanburg had been featured in **Reader's Digest, Forbes,** and **Neve Reuve** (a major German magazine). Subsequently, **Time, The International Herald Tribune,** and even West German television carried about the foreign investment phenomenon in Spartanburg.

WHY THE SUCCESS?

Many reasons have been cited for Spartanburg's success in attracting foreign investors. Numerous reports mention its transportation facilities as a primary factor. (Interstate highways 26 and 85 intersect nearby, and a major airport serves the area as an "inland port"[4] for international trade.) Other reasons have included (1) the existence of a significant amount of international trade, (2) the

The sprawling Hoechst Fibers Industries plant is located on a 670-acre site, approximately 10 miles northeast of Spartanburg on Interstate 85. This plant represents the second largest capital investment outside Germany by Hoechst AG, one of the world's largest chemical companies.

[4]An "inland port" status permits United States customs activities at the airport. For more information on inland ports, see "The Columbia Port of Entry," this issue.

TABLE 1. Foreign Owned Firms in Spartanburg

Country	Number of Firms
West Germany	26
Switzerland	11
France	3
Great Britain	3
Austria	2
Canada	1
Denmark	1
Italy	1
Japan	1
Other*	4
Total	53

*Those firms with owners in more than one foreign country.

of a foreign trade zone in the area; (5) the availability of public funds for roads, sewers, etc.; (6) the possibility of low cost financing; (7) the availability of relatively inexpensive utilities; (8) the existence of reportedly good schools; (9) the absence of an inventory tax on manufactured goods; and (10) the existence of a 5-year moratorium on most property taxes. In addition, attractive investment features include a low percentage of labor unionization in the state, a "right-to-work" law, and a training program for workers.

With relatively low labor costs and labor trained for specific jobs at state government expense, it is no wonder that one executive interviewed mentioned that the main reason for investing in Spartanburg was that money could be made there. In fact, former Governor John C. West guaranteed that South Carolina programs and training made it possible for new firms to be in the black within six months.

However, since many cities in South Carolina can claim most of these same attractive features, these reasons alone cannot fully explain the drawing power of Spartanburg. Perhaps the most significant factor is really local community support.

The late Richard E. Tukey, who served as Executive Vice-President of the Spartanburg Area Chamber of Commerce until his death in 1979, is often recognized as the real author of that area's success. It was Tukey who developed the frequently cited "Spartanburg formula": Careful Market Studies to Determine Which Firms Might Best Fit in + Sales Efforts + Follow Through = Foreign Investment Success.

Tukey not only excelled in all three of these areas, but he also thoroughly trained his successor, Mrs. Ruth Calvert. Mrs. Calvert currently serves as the General Manager of Economic Development for the chamber and has done an excellent job maintaining the momentum.

Further, the Chamber of Commerce has been greatly aided by many community leaders. This broad based support has stemmed from such diverse sectors as City Hall, the newspapers, and community educators, and has played an important role in making Spartanburg feel like a second home to new arrivals. This support and "follow-through" have not gone unnoticed. Word of mouth has spread the story of Spartanburg's hospitality to friends "back home" also thinking of investing in the United States.

THE TOTAL IMPACT

Many people talk about the impact foreign direct investment has had on jobs and tax revenues, but what has been the **total** impact of FDI on the area? This, of course, is extremely difficult to answer. Not only do jobs need to be totaled and financial flows identified, but attitudes must also be measured and efforts made to determine such qualitative dimensions as community pride and confidence. Of consideration, too, are the attitudes and actions of community leaders.

In fact, because the support of the community leadership of Spartanburg has been so strong, it is quite difficult to measure the general public reaction to FDI in the area. A typical method for evaluating public reaction, for example, is to monitor the opinions reported in the local newspapers. In Spartanburg, however, the only stories that could be found were positive. There were not even any negative letters to the editor.

While continuing his search for information about the public's opinion of FDI in Spartanburg, this author discovered an interesting and unusual source. In 1979, a West German television crew visited Spartanburg to prepare a report regarding FDI. As part of its report, the West Germans randomly interviewed eight individuals about their attitudes concerning the foreign "invasion" in Spartanburg. The reporters asked such questions as "What do you think about German money in this region?" "Would you like to work for a German firm?" and "Would you say that a German company would help people here to a better future?" Sometimes the questions were modified and even included some possibly derogatory words (i.e., "Krauts"), but the interviewees still responded

TABLE 2. Survey Results

Statement	Average Opinion** in	
	Greenville	Spartanburg
1. I like being exposed to foreign ideas and ways of doing things.	4.7	6.0
2. Foreign owned firms in Spartanburg* have had a bad effect on local culture.	2.6	1.9
3. It is good for local American children to be able to go to school with children from foreign countries.	5.4	5.8
4. Foreign investors have too much influence in local, social, and community organizations.	3.1	2.8
5. In comparison to American owned firms, foreign owned firms in Spartanburg* offer better than average job security for the same kind of work.	3.9	4.7
6. Foreign investors in Spartanburg* do not pay their fair share of local taxes.	3.5	2.9
7. Foreign owned firms in Spartanburg* pay higher than average wages for the same kind of work.	3.8	4.4
8. Foreign owned firms do not contribute enough to community fund raising campaigns.	3.5	3.2
9. I would prefer that local American people rather than foreigners own a local company.	4.9	3.4
10. Foreign investment has made Spartanburg* a more interesting place to live.	4.7	5.4
11. Foreigners should not be permitted to buy local firms. If they are going to invest in Spartanburg* they should start a new company.	3.6	3.8
12. Foreign investment in Spartanburg* has improved the quality of my life.	3.8	4.6
13. I would prefer that foreigners rather than out-of-staters own a local company.	3.1	4.1
14. Germans have invested the most money in the Spartanburg* area.	3.8	4.7
15. Foreign owned firms in Spartanburg* cause more problems than other firms here.	3.4	2.9
16. Foreign owned firms cause more problems in Spartanburg* than they are worth.	3.1	2.3
17. There would be fewer jobs in the Spartanburg* area if foreign firms did not invest here.	5.4	5.5
18. The foreign owned firms control too much of the local economy.	3.5	3.4
19. I would prefer having fewer foreign owned firms in Spartanburg.*	4.0	3.1
20. Foreign owned firms in Spartanburg* bring more benefits to the area than do the other firms here.	3.5	4.2
21. There are more foreign owned firms in Spartanburg* than in any other community in South Carolina.	4.0	4.8
22. I would like to see less time and money spent on attracting foreign firms to Spartanburg.*	3.9	3.2
23. I support the Chamber of Commerce programs to attract foreign firms to Spartanburg.*	4.6	4.3

*NOTE: The word "Greenville" was used to replace "Spartanburg" in all instances for those people living in Greenville.

**OPINION SCALE: 1 = strongly disagree
2 = moderately disagree
3 = slightly disagree
4 = neutral
5 = slightly agree
6 = moderately agree
7 = strongly agree

and even included some possibly derogatory words (i.e., "Krauts"), but the interviewees still responded favorably. In fact, everyone questioned replied positively to each query.

Why this favorable reaction? Were the community leaders able to sway the local population? Was the television crew tricked or unable to measure adequately the real sentiment? Does the community really back FDI completely?

SURVEY RESULTS

To obtain more information regarding public opinion about FDI, this author used The University of South Carolina Consumer Panel to poll the residents of the Spartanburg area. The consumer panel, consisting of individuals considered to be fairly representative of the area, had 100 members from Greenville and 25 from Spartanburg.[5] These 125 individuals were mailed a pretested questionnaire. Of these, 52 responded: 42 from Greenville and 10 from Spartanburg, a response rate of about 41 percent.

On the questionnaire, the panelists were asked to indicate how strongly they agreed or disagreed with each of 23 statements (listed in Table 2). A seven-point Likert-type scale was used. Respondents were provided an opinion scale ranging from "strongly disagree" with a statement (one point) to "strongly agree" (seven points). The average responses from both Greenville and Spartanburg are reported in the table.

It should be noted that even though individuals from both cities expressed positive opinions regarding foreign investment, those from Spartanburg favored the investment more strongly. In fact, Spartanburg's averages indicate support in every statement. The Greenville reaction was somewhat mixed. The panelists supported 5 of the 10 positive opinions about FDI, but they also supported 2 of the 11 negative statements. (They preferred American ownership to foreign ownership.)

This is not to suggest that the people in Greenville rejected the concept of foreign investment in their city. In fact, their responses supported 5 of the 10 positive statements and rejected 9 of the 11 negative statements. In effect, they expressed positive attitudes 67 percent of the time.

The Spartanburg people, however, clearly stood out in their support. Every statement gained a favorable response and every average indicated support for foreign investment.

CONCLUSIONS

It is easy to suggest that the heavy amount of foreign investment in the community has not alienated the local population. It is also possible to suggest that these findings tend to support the hypothesis that exposure to foreign investment reduces prejudice and increases willingness to welcome the inflow. After all, Spartanburg has a higher proportion of FDI and its inhabitants maintain the more favorable attitudes.

It must be noted, though, that such conclusions are not fully defendable as we do not know what the attitudes of the inhabitants were before the foreign investors arrived. Possibly, both cities held even more favorable attitudes in the early 1960's, but this seems doubtful. All that can be said with certainty at this point is that even with heavy amounts of FDI flowing into the community, the locals welcome foreign investors. The investments have not "turned off" the local population and have possibly helped increase favorable attitudes.

Obviously, these data represent a mere fraction of the amount of possible research into the area. For example, it would be highly informative to measure the attitudes of workers and to investigate social implications. If funding can be obtained, a team of researchers from The University of South Carolina's College of Business Administration will continue this study.

Even without the broader study, though, it seems clear that a great deal is happening in Spartanburg: thousands of new jobs have been created, income averages have risen faster than the national average, new technologies have been introduced, new money has come in, and major improvements have been made in music and arts. The city also now has French and Swiss consuls, many international societies and associations, and a French cooking school. The locals even celebrate Bastille Day, Oktoberfest, and other European holidays! No wonder Spartanburg has been called America's most international city.

People in the community seem very satisfied with these changes. It should therefore come as no surprise that many states and cities have sent representatives to Spartanburg to discover their secret.

[5] It should be noted that Greenville was selected as the comparison city for two major reasons: (1) located near Spartanburg, it has many similar geographic characteristics, and (2) it has the second largest amount of FDI in South Carolina.

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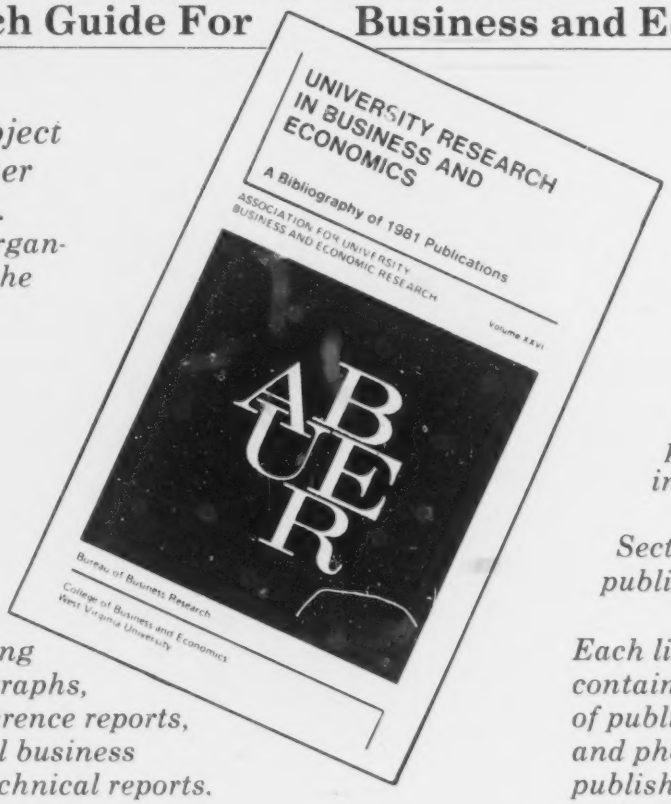
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The Management Bookshelf

By Dwight Gardner, Business Librarian, M.B.A., M.S.L.S.

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UP FRONT FINANCING: THE ENTREPRENEUR'S GUIDE
by David Silver
John Wiley & Sons/Ronald Press
605 Third Ave.
New York, NY 10016
1982, 245 pp., $15.95
Silver explains how to obtain the capital needed to start or expand a small business. He explores the advantages and disadvantages, time requirements, and cost factors associated with 20 different methods of financing, and demonstrates how to prepare an effective business plan, a key document in the request for capital. He also outlines the 5 stages of business growth and the optimum method of financing each.

FOR SOME THE DREAM CAME TRUE
Edited by Duncan Norton-Taylor
Lyle Stuart, Inc.
120 Enterprise Ave.
Secaucus, NJ 07094
1981, 303 pp., $15
This collection of articles was taken from the past 50 years of **Fortune** magazine, as selected by one of its former managing editors. They recount the story of American capitalism from the Great Depression to 1980, focusing on the important events, trends, personalities, and industrial achievements of each decade. Contributors include James Schlesinger, Henry Luce, and William Whyte.

MANAGER'S COMPLETE GUIDE TO FINANCIAL TECHNIQUES
by George Aragon
Free Press
The Macmillan Co.
866 Third Ave.
New York, NY 10022
1982, 252 pp., $15.95
Aragon discusses various financial techniques and concepts designed to maximize the company's profits while at the same time maintaining the continuity of its operations. He presents his analysis within the framework of the return on investment (ROI) concept. He covers capital budgeting, ratio analysis, and managing the cost of funds, gearing his presentation toward the non-specialist.

MANAGING AND EMPLOYING THE HANDICAPPED: THE UNTAPPED POTENTIAL
by Gopal Pati and John Adkins
Brace-Park Press
Lake Forest, IL 60045
1981, 365 pp., $24.95 cloth, $17.95 paperback
This volume emphasizes that the handicapped are an often overlooked human resource that holds great potential value for business. It provides practical information for employers on the mechanics of hiring qualified handicapped workers, and covers training and development programs, federal and state rehabilitation services, and the legal framework for employment.

THE BIG EIGHT
by Mark Stevens
The Macmillan Co.
1981, 240 pp., $12.95
Stevens provides an inside look at America's largest accounting firms, from Arthur Andersen to Touche Ross. He traces their development into the huge, influential organizations with worldwide operations that they are today, and examines their role as auditor, consultant, and tax specialist for business and government.

BANKING JOB FINDER
by Mainstream Access
Prentice-Hall, Inc.
Englewood Cliffs, NJ 07362
1981, 216 pp., $15.95
This book is part of the Mainstream Access Job Finder Series which gives information on various industries and professions the job hunter will need in pursuing a career in a given field. This latest volume covers the products, services, markets, and functions of the various types of banking institutions, as well as opportunities for employment. It also includes helpful sections on the job search, resume preparation, and interviewing techniques.

* * *

Readers are invited to submit titles of books that they wish to call to the attention of others.

STATISTICAL INDICATORS OF SOUTH CAROLINA BUSINESS

ITEMS	August 1982	August 1981	Latest Month Percentage Change From Year Ago
Total Bank Deposits ($ millions)	$ 6,980.9	$ 6,170.9	+ 13.1
Demand	3,065.7	2,911.4	+ 5.3
Time	3,915.2	3,259.5	+ 20.1
Total Bank Loans ($ millions)[b]	N.A.	N.A.	—
Savings in Savings and Loan Associations ($ millions)	5,955.9	5,662.3	+ 5.2
Sales and Use Tax Collections ($ thousands)	52,294.7	52,432.9	- .3
Labor Market:			
Civilian Labor Force (thousands)	1,483.8	1,425.3	+ 4.1
Employment	1,316.1	1,309.4	+ 0.5
Rate of Unemployment (percentage)	11.3	8.1	+ 39.5
Nonfarm Wage and Salary Employment (in thousands)	1,164.1	1,190.1	- 2.2
Manufacturing	359.6	392.6	- 8.4
Contract Construction	66.3	73.7	- 10.0
Transportation and Public Utilities	54.6	54.2	+ 0.7
Wholesale and Retail Trade	240.3	236.4	+ 1.6
Finance, Insurance, and Real Estate	52.9	51.1	+ 3.5
Services, Mining, and Miscellaneous	176.1	169.2	+ 4.1
Government	214.3	212.9	+ 0.7
Average Hourly Earnings, All Manufacturing (in dollars)	$ 6.65	$ 6.30	+ 5.6
Initial Unemployment Claims Filed in South Carolina	74,113	23,226	+219.1
Placements by South Carolina Employment Offices (nonagricultural)	5,260	7,785	- 32.4
Indexes of Prices Received by Farmers (1977=100)			
All Farm Products	128	126	+ 1.6
All Crops	159	156	+ 1.9
Livestock and Products	89	88	+ 1.1
S.C. Parity Ratio	82	83	- 1.2
New Motor Vehicle Registrations			
Cars	7,472	8,522	- 12.3
Trucks	2,057	2,062	- .2

	August 1982	August 1981	First 8 Months 1982	First 8 Months 1981	First 8 Months Percentage Change
Valuation of Building Permits Issued ($ millions)					
Total for all S.C. Counties	$158.3	$137.4	$1,280.6	$1,103.7	+ 16.0
Available County Data					
Aiken	1.1	2.1	22.1	21.5	+ 2.8
Berkeley	2.7	4.3	25.5	24.8	+ 2.8
Charleston	14.0	14.6	167.7	144.4	+ 16.1
Dorchester	2.3	3.0	22.9	17.5	+ 30.9
Lexington	4.1	6.0	51.4	36.6	+ 40.4
Richland	34.0	13.6	118.3	100.5	+ 17.7
Greenville	10.5	12.9	137.7	109.3	+ 26.0
Pickens	2.4	1.2	12.5	22.2	- 43.7
Spartanburg	12.7	2.9	51.8	84.7	- 38.8

[a]Less than one-half of 1 percent.

[b]Due to the termination of certain data series by the Federal Reserve Bank of Richmond, this series is no longer available.

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Volume XXIX, Number 4
March 1983

"New Concepts in Marketing Health Care"
by Jeffrey J. Lefko

"Investor-Owned Hospitals: Profiting From Health Care"
by Benjamin M. Oviatt

"Hospital Reimbursement and Indigent Care: The Costs of a Nonpolicy"
by Philip Jacobs and Greg R. Alexander

"Economics of Occupational Health"
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"Self-Care Health Behavior Within South Carolina Families: A Comparison of 1978 and 1980 Findings"
by Alan D. Bauerschmidt, Leanne C. McGrath, and Judith W. Alexander

"The Employer and Employment Laws"
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"Bottom Lines"
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Statistical Indicators of South Carolina Business

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Summary of Contents

3 **New Concepts in Marketing Health Care** by Jeffrey J. Lefko, Vice-President for Planning for the Greenville Hospital System, depicts the environmental climate hospitals and health care institutions will be facing over the next several years and explains new developments in marketing health care services and programs designed to cope with these changes and pressures.

7 In **Investor-Owned Hospitals: Profiting From Health Care,** Benjamin M. Oviatt illuminates the issues in the debate over the legitimacy of proprietary hospital care and reveals the extent of this form of enterprise in the United States in general and South Carolina in particular.

13 According to Dr. Philip Jacobs of USC's College of Business Administration and Greg R. Alexander of USC's School of Medicine, **Hospital Reimbursement and Indigent Care: The Costs of a Nonpolicy** is now a matter of concern for patients with private insurance. In this article Professors Jacobs and Alexander estimate the cost of present and possible future policies to the "typical" family holding a hospital insurance policy.

18 In **Economics of Occupational Health,** Dr. Alan Chovil and Greg R. Alexander of USC's School of Medicine "take stock of present occupational health practices and review their potentials for economically sound development into areas that may impinge on both personal fitness and health care costs."

24 In **Self-Care Health Behavior Within South Carolina Families: A Comparison of 1978 and 1980 Findings,** Dr. Alan D. Bauerschmidt and Mrs. Leanne C. McGrath of USC's College of Business Administration and Dr. Judith W. Alexander of USC's College of Nursing report the preliminary findings of a 1980 study of the self-care practices of South Carolina families.

30 **The Employer and Employment Laws,** a regular feature by James J. Baldwin, Partner in the law firm of Haynsworth, Baldwin, Miles, Johnson, Greaves and Edwards. In **Employee Committees: Be Sure They Are Legal,** Baldwin warns employers that if they are not careful about how they establish and operate employee committees, they can violate the National Labor Relations Act.

32 **Bottom Lines,** a regular feature by Dr. James B. Edwards, Professor of Accounting and expert consultant to Management. This month, Dr. Edwards gives **Notice of Important Changes** pertaining to the South Carolina state individual income tax filing requirements that apply to returns currently being filed for 1982. Please note: these changes occurred **after** the December 1982 **Bottom Lines** was written, and are exceptions to material presented in that column.

33 In **Labor Productivity and Employee Relations,** Robert T. Thompson, Jr., Partner in the Greenville law firm of Thompson, Mann and Hutson, surveys the business practices in use in Japan that have been identified as significant contributors to the continuous increase in employee productivity in that country, and observes how similar practices may be implemented as part of employee relations programs in the business community of the United States.

43 **The Management Bookshelf,** a regular feature in which Dwight Gardner, USC BA's Business Librarian, reviews books of interest to business practitioners.

44 **Statistical Indicators of South Carolina Business.** A regular feature, listing the latest available data.

business and economic review

Vol. XXIX, No. 4 March 1983

Division of Research
College of Business Administration
The University of South Carolina
Columbia, South Carolina 29208

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Published in Oct., Nov., Dec., March, April, and May by The University of South Carolina as a service for those interested in business and economic matters.

This month's cover. This mock-up of heart surgery illustrates just one of many aspects of health care. An area of interest and concern to government, the general public, and the world of business, the critical health care field is the subject of five articles in this issue, pages 3-30. (Photo by Joe F. Jordan is courtesy of Jeffrey J. Lefko, Greenville Hospital System.)

New Concepts in Marketing Health Care

By Jeffrey J. Lefko

INTRODUCTION

Present health care managers and hospital administrators are faced with a myriad of environmental changes and pressures that are causing hospitals and not-for-profit health organizations to face extreme financial difficulties and, in some instances, to go bankrupt. The situation has worsened recently because of the uncertain economic climate and cutbacks in governmental support. The following brief description of the 1980's has been developed to depict the environmental climate hospitals and health care institutions will be facing over the next several years and to explain new developments in marketing health care services and programs.

THE 1980'S

Population Changes

The effects of population changes on health care institutions nationwide will be numerous in the future. South Carolina and the rest of the Sunbelt in particular will experience a higher than average population growth due to the attractiveness of its labor and developmental climate. A major result will be a higher growth rate of geriatrics, i.e., individuals over the age of 65. The percentage of older adults as a population group is growing twice as fast as the rest of the population, even though it represents, on the average, approximately 10-12 percent of the population in South Carolina. There will also be population shifts, primarily around the major metropolitan areas, that will impact on the public's expectations and on the types of services possible.

As a result of these changes in population, health care institutions, particularly hospitals, will be attempting to seek out underserved market locations to establish programs to respond to perceived needs. Health care institutions will also identify the markets underserved, such as the geriatric market, so they can establish programs and alternatives to institutionalization and diversify into other business lines to broaden revenue bases.

The Economy

The moderation in the economy has had, and will continue to have, several effects on health care organizations. Unemployment rates and interest rates have been the dominant economic factors. Cursory investigation reflects a direct correlation between high unemployment and lower inpatient hospital utilization. As insurance benefits cease during unemployment or layoffs, people tend to delay admissions to hospitals for elective types of medical or surgical problems. Obviously, the emergency or emergent problems experienced will continue to be met. High interest rates have caused institutions to cut back seriously on capital projects and ventures and to delay getting into the capital market until a more favorable situation exists.

As a result of these economic changes, health organizations can be expected to spend less capital and to consider diversified approaches to health care. In addition, these institutions are being forced more than ever to evaluate all services on a cost/benefit basis and to consider ongoing operations as well as new ventures in this manner. Cost containment, productivity enhancement, shared

Jeffrey J. Lefko is Vice-President for Planning for the Greenville Hospital System. He earned a B.S. Degree in Business Administration at the University of Nebraska and an M.H.A. Degree in Hospital Administration at Washington University. Listed in **Outstanding Young Men of America**, 1974 edition, Lefko, a former National Fellow with the American Hospital Association (AHA) and Blue Cross Association, has served as a Vice-President for the Jewish Hospital (St. Louis) and the Methodist Hospital of Indiana, and as an Administrative Resident of St. John's Mercy Hospital (St. Louis) and an Administrative Extern at Lincoln General Hospital (Lincoln, Nebraska). He is a member of the AHA Council on Management and the American College of Hospital Administrators; a Board Member of the AHA Society for Hospital Planning and the Carl Rowland Memorial Library (Duke Endowment); a member and former Chairman of the Invitational Health Planning Forum; and Adjunct Instructor for the Washington University Program in Health Care Administration; a member of the Appalachian Health Council's Health Systems Plan Committee and the Community Planning Council's Public Policy Committee; and Chairman of the Work Group on Issues in Planning and a member of the Standing Operational Committee on Planning and Data, South Carolina Hospital Association.

services, and joint service arrangements will be the anticipated modes of operation in the 1980's.

Regulations and Controls

In spite of the Reagan Administration's pledges to cut back on regulations, these controls are still plentiful in the health care arena. What is expected from this and subsequent administrations will be moderation in new regulations, deemphasis on government-sponsored health planning, emphasis on competitive forces within the health care sector, emphasis on prevention and wellness, a push for fewer acute beds, and, finally, attempts to stimulate outpatient services as alternatives to institutionalization. Health care institutions, particularly hospitals, will be pressured to establish alternatives to institutionalization, such as ambulatory care and ambulatory surgery. Hospitals will also attempt to re-align acute beds to maximize resources to the fullest extent possible. Additional competitive forces will prompt hospitals to explore new lines of business and to adopt marketing strategies.

Financial Changes

It is anticipated that reductions in government-supported health programs will continue, probably indefinitely, at least through the next few years. Reductions to date in the financial sources of reimbursement have forced hospitals and other institutions to engage in "cost-shifting" to private patients. This will continue until alternative ways are devised to assure ongoing funding of government-supported patients. Financial constraints limit the ability of hospitals to form capital, to obtain access to different capital sources, and in many respects to acquire new high technology. It is expected that government will explore new experimental reimbursement approaches over the next few years to gain some type of control over the expensive health care dollar.

Health care institutions, due to these financial constraints, will attempt to maximize operating margins by generating additional capital wherever possible and appropriate. These institutions are seeking new revenue sources in a variety of ways including outside foundation, endowment, and other philanthropic support. The use of different pricing and marketing strategies as a way to assure the use of services will be commonly accepted. Efforts to minimize uncompensated care will continue. Many hospitals regarded as referral centers are already attempting to limit the care rendered patients unable to pay fully to those individuals in their own counties. These types of efforts will continue until some type of viable mechanism for providing care for all levels of patients is devised.

Diversification

In the 1980's, hospitals will seek alternative uses to acute care. Many health care organizations will take advantage of opportunities to generate additional capital and revenue sources. This will place increased reliance on the emphasis on marketing and the concomitant skills to be discussed later in this article.

As a result of diversification and new ventures, many hospitals are already reorganizing their corporate structures to maximize reimbursement, to diversify, and to protect their assets. Numerous organizations are forming subsidiaries, joint ventures, and other corporate entities to enable them to market their programs and services and to engage in a variety of different shared service arrangements to broaden their programmatic and service base.

Competition

As previously indicated, the government is experimenting with a variety of competitive arrangements in health care. These will continue through the 1980's. Not-for-profit hospitals are experiencing competition from several sources, i.e., investor-owned organizations, medical staffs who have set up their own private health care arrangements and organizations, and other not-for-profit hospitals engaging in similar types of services and programs in overlapping market areas. Competition will also be felt in the 1980's from alternative delivery mechanisms such as health maintenance organizations (HMO), independent practice associations (IPA), and preferred provided organizations (PPO).

As a result of competitive forces, health care institutions are changing their relationships with other health care institutions through such organizational variations as mergers, consolidations, management contracts, and multi-institutional systems. Hospitals are exploring different approaches such as joint ventures with physicians and other groups to provide services in symbiotic arrangements. In many locations, hospitals are forming their own alternative delivery mechanisms to combine the financial, as well as the service, base into a single organization. All of these changes are causing health care organizations to rethink their market positions to attempt to achieve maximum market share penetration.

Increasing Supply of Physicians

The supply of physicians has been increasing over the last decade and will continue to do so through the 1980's. This growth will impact on the

way health and hospital care is rendered, and will affect individual physician-hospital relationships substantially. These effects will be felt in the amount of work done in private physicians' offices as well as in the types of private physician activities attempted such as free-standing ambulatory surgery centers, emergency centers, and primary care centers.

Hospitals are responding to these changes in the supply of physicians by setting up alternative arrangements and approaches with their own medical staffs. They are finding it easier to attract medical specialists in some of the areas to fill gaps in physician resources. Hospital-physician relationships will continue to change over the next several years, and innovative approaches will be attempted.

Business and Industry Involvement

As business and industry become increasingly concerned about the rise in hospital and health care costs and the subsequent effect of those increases on insurance premiums for their own employees, efforts will be undertaken by the business and industrial sector to control health care costs and to devise ways of minimizing expensive services used by their employees. Many businesses in South Carolina, as well as other areas of the country, are already establishing business coalitions to attempt to become better educated about what is causing health care cost increases and to work with hospitals and other providers in keeping those costs as low as possible. There will be continued emphasis on employee wellness and health promotion within the private business sector, and experimental insurance schemes with providers will continue. Business and industry will attempt to monitor closely the amount of health care being rendered their own employees and will work with hospitals in developing utilization reviews. In addition, there will be increased interest by many businesses and industries in establishing their own alternative delivery mechanisms, such as HMO's.

Many health care institutions will try to reach out to the businesses and industries in their own areas to assist them in performing utilization reviews. In addition, hospitals will actively discuss alternative financing arrangements with large employer groups and insurers, and will work with business and industry in establishing preadmission testing and other means to reduce overall hospital stays. These changes and forces will continue over the next few years and, undoubtedly, will cause hospitals and businesses to form alliances to work together to hold down costs.

CHALLENGES FOR HEALTH CARE ORGANIZATIONS

The health care institution of the 1980's is intimately dependent and influenced by its environment, and its role is being evaluated and challenged increasingly from a number of different viewpoints. While acute care still remains as one of the major businesses of a hospital, there are other concerns that have appeared to balance the acute care being rendered. Survival is the name of the game, rather than expansion, and it is survival in a competitive market.

The hospital of the 1980's is struggling to maintain patient referrals and is attempting to seek out new markets under competitive restraints. It has seen the physician population rise considerably, and has more competition from its own medical staff. While national health insurance is highly unlikely at this point in time, the health care institutions of the 1980's are having great difficulty coping with the innumerable number of regulatory agencies and the reductions in federally sponsored reimbursement of health programs. There is slower implementation of newly developed advanced technology, with priorities being placed on limited capital resources. While the planning is still, by and large, facility oriented, the hospital of the 1980's has to include in its planning the services to be offered, the patient groups to be served, and the programs to be developed. Marketing will play an ever increasing role in the health care industry, and it is important to understand how and why it can be used.

A MARKETING APPROACH TO HEALTH CARE

To the average business executive, "marketing" describes one of the essential elements of any commercial or business enterprise. To most businesses, marketing means finding a need for a product or service, creating that product or service, and then selling that product or service to the public. To the average health care executive or trustee, the term marketing usually means "selling" or "merchandising" a service or program. The term marketing in health care circles is a relatively new one since most health care organizations have not actually had to apply marketing to their services and programs. Rather, they have simply provided programs and services and expected them to be used by the public. In the hospital area, up until the last few years, there was a common expression

that "a hospital bed would generate its own demand." In other words, the simple existence of a hospital bed would stimulate and encourage actual use. Now, however, it is quite obvious to hospital executives that the existence of a bed, or any program or service, no longer automatically guarantees its use.

Therefore, a whole new perspective and orientation is necessary on the part of health care executives. It is recognized now that the passive public relations/marketing efforts in the past have simply not served either the public or the health care institutions well, and that some new type of marketing approach is needed if these institutions are to survive in the future. The dilemma, however, is to determine what type of marketing effort really does serve the interests of both the public and health care institutions. What is needed is a commitment to a health care marketing philosophy or orientation.

One way of examining the notion of marketing is to perceive it as a management philosophy. It is a **commitment** on the part of top management to determine what the needs of the institution's target populations are, whether they are in a position to respond to those needs, and, if so, to proceed accordingly. It is a total orientation within the institution that permeates the entire organization at all employee, patient, and service levels.

Robin E. Scott McStravich of the University of Washington is one of the leading writers and thinkers on marketing in the health care sector. In his book **Marketing Health Care,** he says that

> health care organizations, and especially hospitals, have tended to follow a nonmarketing or even an antimarketing approach in their planning and developmental efforts. Their basic philosophy has been that they should provide the best possible services as

Overview of Greenville Hospital Center. (Photo courtesy of author.)

they see them and then hope enough people will make use of those services to make their efforts worthwhile. In other words, an organization decides what it wants to do and the public is supposed to be willing to have it done to them.

The marketing philosophy is substantially different from the traditional philosophy of providing the best possible and highest quality services to the public as the organization sees fit. Rather, the former suggests that the organization try to determine what the public perceives as its needs and then to develop programs to meet those needs. This approach begins with the community to be served and moves back toward the organization doing the serving. It links the community's real needs with the organization's real capacity, and leads to a relationship that honestly and openly benefits everyone.

SPECIFIC CONSIDERATIONS IN MARKETING HEALTH SERVICES

There are several specific points that should be considered when health care organizations are planning the marketing of their programs and services. First, it is important they recognize that consumers may not necessarily share their enthusiasm for, and/or interest in, the programs and services provided. Times have changed. Consumers are more knowledgeable and particular about how they spend financial resources and, as a consequence, are becoming more selective in terms of the type of health services they are using. The universal emphasis on health promotion and health awareness is causing consumers to become more concerned about what is done to them and who is doing it.

The next consideration is that consumers are now at a point where they do in fact appreciate variations and distinctions in levels of services and programs provided. They are more knowledgeable about the complexity and sophistication of services, and are able to distinguish between primary and specialty offerings.

A third important consideration is that competition for specific products and services takes different forms. There is obvious competition for inpatient surgical services from outside ambulatory surgery centers or private physician offices. However, there are other products or services rendered in hospitals, such as childbirth education, which are being done by a variety of community organizations and agencies and even in private children's stores.

Finally, consideration should be given to developing specific strategies for different market segments. Even within certain key hospital markets, such as the medical staff, there are individualized needs and demands, i.e., those of the psychiatrists may not be the same as those of the neurosurgeons on the same staff. Therefore, it is important that a hospital evaluate all of its market segments and then determine strategies to accommodate each.

SUMMARY

The environment in which health care organizations operate is constantly changing and will continue to modify the health care executive's attitudes and perceptions. It is important, therefore, that all health care institutions adopt an overall philosophy of marketing that first takes a look at the consumer's needs and then gears its operations accordingly. It is those institutions with a marketing philosophy that will be able to survive the 1980's and beyond, for it is they who will be able to balance the increasing demands and expectations of the public with financial, capital, human, and physical constraints.

Investor-Owned Hospitals: Profiting From Health Care[1]

By Benjamin M. Oviatt[2]

The Charter Rivers Hospital recently opened its doors in Lexington County. Besides treating patients with psychiatric, drug, and alcohol problems, the 80-bed facility exists to make a profit for

[1]A bibliography for this article is available from the author at the College of Business Administration, The University of South Carolina, Columbia, SC 29208.

[2]The author's deep appreciation goes to Professor Alan D. Bauerschmidt of the USC business faculty for valued inspiration and a review of a draft of this article. Thanks also go to Ms. Ellen Berch of the South Carolina Hospital Association who provided vital information. Finally, a significant debt is owed to the hospital trustees in South Carolina and to the executives of the hospital management firms who graciously shared their very enlightening ideas.

investors. It is owned and managed by Charter Medical Corporation, an investor-owned firm headquartered in Macon, Georgia. This corporation operates more than 30 hospitals, mostly psychiatric, in about a dozen states and in England. Last year it earned an estimated $18.4 million on $295 million in revenue. Charter Medical's stock has performed very well in recent years. In 1979, its highest price was $19.62 per share; last year it exceeded $35, and the stock split in various ratios 4 times during the intervening period. Its price/earnings multiple of 23 in December 1982 — a time when the average multiple was about 11 — indicated that investors viewed its future as promising.

The establishment of Charter Rivers Hospital was controversial, however, because it was proprietary. The corporation's application for a Certificate of Need which would allow it to build the hospital had been opposed by some citizens, not because the facility was unnecessary, but because Charter Medical was investor-owned and had the explicit objective of making a profit from treating individuals in poor health. The opposition, more comfortable with the usual nonprofit hospital, was concerned that the managers at Charter Medical would emphasize the firm's profit objectives and neglect the responsibility of providing high quality health services. After some debate, however, planning authorities, who believed that Charter Medical would effectively discharge its responsibilities, granted the certificate which culminated in the recent opening of the proposed facility.

After some early doubts, other South Carolina communities also have welcomed investor-owned hospital management firms. The Piedmont Medical Center in Rock Hill was built by American Medical International (AMI), a California based firm much larger then Charter Medical. The new Medical Center replaced the inadequate York General Hospital which had been leased by AMI during the construction period. Last year, the Barnwell County Memorial Hospital trustees hired the Hospital Corporation of America, the world's largest hospital management firm with over 350 institutions, to manage their facility for a fee, while the hospital remained a nonprofit corporation. The map following shows the location of South Carolina hospitals that are owned or managed by investors or investor-owned firms.

The debate over the role of investor-owned hospitals in South Carolina, however, continues. The Hospital Corporation of America (HCA) failed in a recent attempt to build an orthopedic hospital in Columbia, and the bids by HCA and Humana, Inc. to build additional acute care beds in Columbia remain unsettled and doubtful. This author's discussions with representatives of investor-owned hospital management firms indicate that opposition to proprietary hospitals is particularly strong in the Columbia area. At the same time, these representatives view South Carolina as a state that will provide significant opportunities for them in the future. Thus, it seems appropriate at this time to illuminate the issues in the debate over the legitimacy of proprietary hospital care, and to reveal the extent of this form of enterprise in the United States in general and South Carolina in particular.

PROPRIETARY HOSPITALS IN THE UNITED STATES

According to the American Hospital Association, 729 of the nation's 5,879 nonfederal short-term general and other special hospitals in 1981 were investor-owned —about 12.4 percent. That percentage remained rather steady over the last decade. However, the percentage of beds owned by investors has climbed, from 6.2 percent in 1971 to 8.7 percent in 1981. The Federation of American Hospitals, an association of investor-owned hospitals, reported that proprietary firms managed 283 nonprofit hospitals under contracts and had 52 hospitals under construction in 1982. Further, 8 firms also owned 40 hospitals and managed another 20 in 14 foreign countries, with the majority being in England, Australia, and Saudi Arabia.

Investor-owned hospitals in the United States are rather concentrated geographically, i.e., 6 states (Texas, California, Florida, Tennessee, Louisiana, and New York) hold 60 percent of all United States proprietary hospitals, and 4 states have no investor-owned hospitals at all.

Altogether, 64 percent of investor-owned hospitals in the United States are part of a chain of geographically dispersed hospitals owned by corporations. This form of organization did not exist

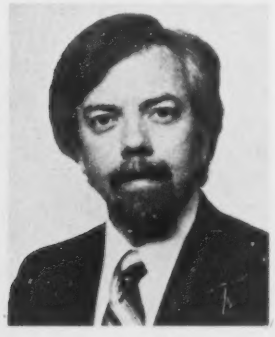

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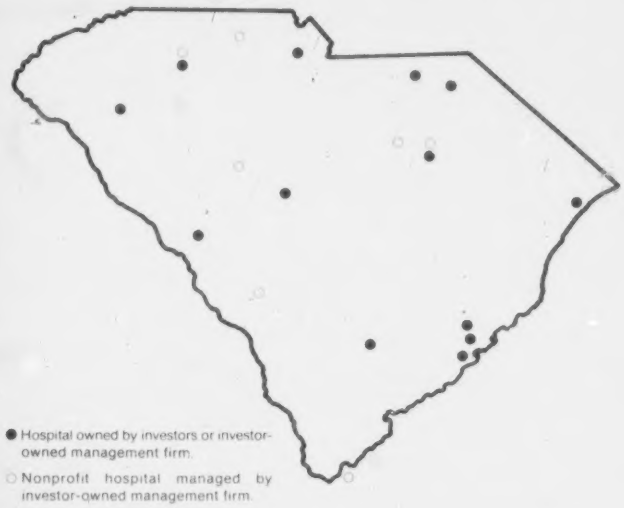
FIGURE. Investor-Owned and Managed Hospitals in South Carolina



● Hospital owned by investors or investor-owned management firm.

○ Nonprofit hospital managed by investor-owned management firm.

Source: South Carolina Hospital Association (December 1982), with supplementary information from some hospitals directly. Affiliations among managed hospitals change frequently.

American Medical International (Hq: California) owns:
Piedmont Medical Center (Rock Hill)

Charter Medical Corporation (Hq: Georgia) owns:
Charter Rivers (West Columbia)

Healthcare International (Hq: Texas) owns:
Southern Pines (Charleston)

Hospital Corporation of America (Hq: Tennessee) manages:
Barnwell County Memorial
Byerly (Hartsville)
Hilton Head
Mary Black (Spartanburg)
Newberry County Memorial
Wilson Clinic & Hospital (Darlington)

Hospital Corporation of America owns:
Aiken Community
Chesterfield General (Cheraw)
Colleton Regional (Walterboro)
Grand Strand General (Myrtle Beach)
Marlboro General (Bennettsville)
North Trident Regional (Charleston)

Humana, Inc. (Hq: Kentucky) owns:
Darlington

Independent Investor-Owned:
Williamston
Wilson Clinic & Hospital (Darlington)

Lifemark Corporation (Hq: Texas) manages:
Cherokee County Memorial (Gaffney)

Lifemark Corporation owns:
Doctors Memorial (Spartanburg)

National Medical Enterprises (Hq: California) owns:
Fenwick Hall (Johns Island)

United Medical Corporation (Hq: Florida) owns:
English Park Medical Center (Marion)

before 1960, but it spread to a number of states in the late 1960's and achieved prominence when a handful of publicly owned hospital management firms became stock market favorites in the late 1970's. Today, there are about 40 corporations in this business. Mergers within this group of firms are common. Many of the major firms have acquired at least 1 other chain of hospitals in the last 5 years, and further consolidation is expected. The 10 largest investor-owned hospital management firms are listed in the table following.

TABLE. The 10 Largest Investor-Owned Hospital Management Firms in the World (ranked by total number of hospitals owned and managed)

Rank	Firm and Headquarters	Hospitals Owned	Hospital Managed	Total
1	Hospital Corporation of America (Nashville, Tennessee)	219	148	367
2	American Medical International (Beverly Hills, Calif.)	83	10	93
3	Humana, Inc. (Louisville, Kentucky)	91	0	91
4	National Medical Enterprises (Los Angeles, Calif.)	60	20	80
5	Advanced Health Systems (Irvine, Calif.)	21	25	46
6	Brim and Associates[a] (Portland, Oregon)	0	36	36
7	Charter Medical Corporation (Macon, Georgia)	31	3	34
8	Lifemark Corporation (Houston, Texas)	25	8	33
9	Community Psychiatric Centers (Santa Ana, Calif.)	20	0	20
10	Paracelsus Hospital Corp.[b] (Osnabruck, W. Germany)	18	0	18

Source: Federation of American Hospitals, 1983 **Directory of Investor-Owned Hospitals and Hospital Management Companies** (Little Rock, Arkansas: 1982).

[a]Wholly owned by Fairview Hospitals, a nonprofit corporation headquartered in Minneapolis, Minnesota.

[b]The United States office of Paracelsus is in Covina, California.

Proprietary hospital management firms have a variety of resources and management skills. Of course, one of their principal resources, unavailable to nonprofit corporations, is access to equity financing. Many local governments that operate hospitals have found it difficult to increase taxes or to borrow additional funds to meet the financial demands of hospital and other civic services. Some have chosen the alternative of selling their

hospitals to proprietary firms which can use stock issues to fund the purchase. A few local governments have even used the cash flow from the sale to set up a trust fund to finance hospital care for indigents. Such an idea for Richland Memorial Hospital in Columbia was informally discussed last year between representatives of the Hospital Corporation of America and some members of the Richland County Council.

When operational factors are of concern, hospital management firms may offer contract management services for a negotiated fee. The most common operational problems reported are overstaffing and failure to take full advantage of all opportunities to earn revenue. Investor-owned firms have also found that contract management may provide preferential access to the purchase of the managed facility if the relationship between the owner and the firm has been satisfactory. It should be noted that contract management provides revenue to the management firm without the need for substantial capital investment. This has allowed a number of nonprofit corporations, such as Carolinas Hospital and Health Services, Inc., to enter the field, and their growth has most recently exceeded that of the proprietary firms in providing this service.

The variety of other offerings of hospital management firms is such that space allows the listing of only a few here: psychiatric services, drug, and alcohol treatment, nursing home management, home health services, health maintenance organizations, laboratory services, medical supplies and equipment, kidney dialysis, outpatient surgery, emergency care centers, professional education services, data processing, and physician and nurse recruitment.

Many executives of investor-owned firms believe that the less expansive economy and, possibly, the recent federal cost control guidelines aimed at hospitals will contribute to their firms' growth and prosperity. They feel that they are well prepared to deliver high quality health care at the lowest possible cost because superior management and financial policies accompany their medical expertise. In what seems to be a confirmation of this belief, some of the larger firms have recently been forced to revise their own growth estimates upward, during a time of contraction for many United States industries. Jeff Goldsmith, a prominent health care researcher, has estimated that 20 percent of all United States hospitals might be owned by investors by 1985 if present trends continue.

In the future it may be difficult to discern the real difference between for-profit hospitals and the nonprofit variety. Many nonprofit hospitals are currently reorganizing into holding companies which will allow them to operate both nonprofit and for-profit organizations. Brim and Associates, for example, a for-profit organization, is the second largest contract manager in the country, and is owned by a nonprofit corporation (see table).

PROPRIETARY HOSPITALS IN SOUTH CAROLINA

There are about 75 nonfederal short-term general and other special hospitals in South Carolina. Of these, 15 are owned by investors, and all except 2 are part of a chain. An additional 6 hospitals in South Carolina are nonprofit, but are managed by for-profit chains. Thus, investors are involved in the operation of 28 percent of the hospitals in our state. The average size of these hospitals is about 113 beds; the average size of all the state's community hospitals is 156 beds. A glance at the map in this article will demonstrate that proprietary hospitals are widely distributed in the state, with many being in the rural areas. This may indicate that it is often those communities with more limited resources that depend on the recruiting, financial, and managerial expertise of the investor-owned chains.

This author's discussions with a few hospital trustees in South Carolina indicated that proprietary hospital management firms were engaged for a number of reasons, and a variety of means were used to determine the preferred firms. One board of trustees, which wanted better management resources but did not want its hospital owned by an outside group, invited bids from one corporation it regarded as the best nonprofit organization in the field and another that it regarded as the best for-profit corporation. The trustees sought information from hospitals managed by both groups. They had long discussions, presentations, and written information to study from both organizations. Although some trustees were ideologically against the for-profit concept, their decision process seemed to point to the investor-owned corporation as the superior group. When the final proposals by each firm indicated that the non-profit organization might cut services and raise rates in their rural hospital — actions the trustees were strongly against — the investor-owned firm, which did not propose such changes, was awarded the contract.

In another South Carolina community the citizens clearly needed and desired a new hospital, but sufficient funds were unavailable. The only alternative seemed to be to have an investor-owned group build the hospital and provide the financing. Any group was invited to submit a proposal, and 5

investor-owned firms responded. Through discussions, the choice was narrowed to 3 acceptable proposals from large national firms. An attempt was made by the decision makers to develop a set of objective criteria to use in the final selection. They considered check lists, studies by subcommittees, studies of each firm's capital budgeting procedures, and the results of extensive interviews with patients, ministers, physicians, governmental authorities, and community leaders in communities where the three firms operated hospitals. Although subjective judgments were still required, one firm seemed to emerge from the process as consistently superior. Even people who were very suspicious of for-profit hospital management firms were adequately satisfied.

It is not known whether or not all, or even most, of the communities with proprietary hospitals are satisfied with the operation of their institutions. However, this author's discussions with a few executives of investor-owned firms and with hospital trustees who were not employed by the firms indicate that some citizens are quite satisfied. The health professionals in one area registered their acceptance of a recently constructed proprietary facility by applying for employment, en masse. After a year long search, one investor-owned firm that manages a rural hospital recruited a much needed physician for the area. Another large investor-owned company recruited physicians by building major new facilities in a rural area of the state.

In addition to being generally satisfied with the physician recruitment efforts of the management firms, the community representatives surveyed were also very pleased with the firm's sensitivity to local interests. In one hospital owned by a management firm the Board of Trustees was advisory and consisted of company executives, community leaders, and local physicians. In another hospital managed by a proprietary firm the board was made up entirely of local citizens. Occasional disagreements between the firm and local representatives were regarded by the trustees as inevitable, but in each case, problems were consistently settled in a satisfactory manner, and without acrimony.

Undoubtedly, some unsatisfied citizens exist in those South Carolina communities that have proprietary hospitals. Each of the individuals with whom this author talked indicated a broad debate occurred when the decision about proprietary management was being considered. A number of devisive issues surfaced during this debate.

PROFITS FROM THE SICK

Of course, the most basic issue is whether a hospital —an institution specifically designed to serve citizens in the most vulnerable and even life threatening circumstances — should be profiting from the service it provides. Certainly, every hospital must generate an excess of revenues (plus subsidies) over expenses to avoid consuming its own assets. However, the issue is whether any excess of revenue over expenses should be distributed to investors, rather than being reinvested in the institution or contributing directly to lower hospital prices. In a society that strives to be capitalistic, the role of profit is to reward entrepreneurs who invest their resources in a productive activity, despite the uncertainty of any returns. In other words, profit attracts investment, which our society needs. In the past, the psychic rewards of altruism toward the sick and suffering often motivated sufficient investment in hospital services without the attraction of profits. Unfortunately, more investment may now be desired than can be attracted by humanitarian concerns today, and profits may be needed to induce investment in hospital services.

Dr. Arnold Relman, Editor of the **New England Journal of Medicine,** in an October 1980 commentary, charged that for-profit hospital corporations would have little sensitivity for the di advantaged, would promote unnecessary services, would eliminate unprofitable services needed by the community, and would probably contribute to higher hospital prices. Dr. Relman felt that physicians practicing in the traditional nonprofit system would be more concerned about good health care, and less concerned about finances. While the overwhelming majority of health care professionals are concerned humanitarians devoted to the patients they serve, many derive very comfortable financial rewards for their devotion — even in a nonprofit setting. This is particularly true of physicians. In a for-profit setting, business professionals and investors are no less concerned with quality health care, and they expect reasonable financial rewards for their own contributions to health care services. Furthermore, the public's suspicion of the motives of business managers involved in health care is so great that managers must act in a responsive manner to insure that their investments are not lost due to some public outcry.

It must also be observed that Medicare, Medicaid, Professional Standards Review Organizations, Certificates of Need, and the myriad of health planning agencies were all formed to relieve inadequate health services to the poor, and to curb

inappropriate utilization, excessive investment, and staggering price rises in a hospital industry that has, for more than 2 decades, been almost 90 percent "nonprofit"! Dr. Relman's concerns are manifest in a predominantly nonprofit system. Thus, this ideological debate is not a fruitful way to highlight differences between investor-owned hospitals and the nonprofit sector.

COST OF CARE

After the ideological differences, the issue of hospital cost is probably the second most debated. Although Dr. Relman fears that hospital prices will be forced up by greedy investor-owned firms, other people, feeling that the future will hold more competition for health care institutions, believe that investor-owned firms with superior management and financial skills will underprice nonprofit institutions for equivalent health services. Several researchers have attempted to investigate the question scientifically, but the results have been quite conflicting. Few conclusions can be drawn from noncomparable groups of hospitals and geographically limited samples. One of the best of the studies that used superior research procedures, while limited to a sample of hospitals only from California, concluded that the prices of for-profit hospitals that were part of a multihospital system were lower than independent, for-profit hospitals and nonprofit hospitals. However, the conflict present in the several published studies suggests that low hospital prices cannot be guaranteed by any particular way of distributing the difference between hospital revenues and expenses.

SKIMMING THE CREAM

A common charge aimed at for-profit hospitals by nonprofit hospital managers is that the former specialize in providing the services most profitable to those patients who can pay the bill. In other words, investor-owned institutions are said to search out a niche in the hospital market where they can "skim the cream" off the total demand for care. Nonprofit managers believe such tactics contribute to high prices, produce deficits for their hospitals, and result in a two-class system of health care — one for the adequately insured and one for indigents. Although no studies have clearly documented "cream skimming," representatives of the investor-owned firms suggest that when their hospital is one of several in a community, they prefer that indigent patients be served at those hospitals receiving direct support from the local government. They also stress that when their hospital is the only one in a community, they do serve indigents.

Cream skimming among patients is simply a sign that health care is not a right in this country, despite slogans stating the contrary. Proprietary hospitals cannot be criticized for shunting indigent patients to hospitals that receive a subsidy from the local government specifically to provide service to such patients. If the subsidy is inadequate, a political decision has made this so, and proprietary hospital managers should not be held responsible.

Cream skimming among hospital services is a nonissue. The only reason that one hospital service, such as respiratory therapy, is more profitable than another, such as obstetrics, is that the charge for the latter is set below cost because it is a prominent service, and the loss is made up by establishing a relatively high price for little noticed offerings. Such practices continue in both profit and nonprofit hospitals. Of course, the administrator of any hospital that loses a cash cow can be heard complaining, while economists tend to be rather unsympathetic.

QUALITY OF CARE

In the past, some studies did indicate that the small, independent, proprietary hospital provided inferior care and was less likely to be accredited. Today, the average proprietary hospital is part of a national chain, has an average of 141 beds, is accredited by the Joint Commission on Accreditation of Hospitals, and, according to one study, is likely to provide a range of services similar to that of a nonprofit hospital. No study has shown that modern proprietary hospitals provide inferior care.

CONCLUSION

This article has provided a brief description of proprietary hospitals in the United States and South Carolina, and has shed some light on the controversial issues in the debate over the legitimacy of such institutions. It suggests that investor-owned hospital management firms are a significant force in the health care industry, and are likely to increase their influence. A review of the debated issues and the experiences of a few South Carolina communities suggest that there are fewer differences between the operation of for-profit and nonprofit hospitals than one might at first suspect. Profit has a legitimate place in the provision of hospital service, and it is not likely to raise costs, decrease quality, or cause inferior service to indigents. All this leads one to conclude that community leaders seeking new management skills and financial resources for their local hospitals might generally ignore the ownership

status of the management firms whose proposals they considered.

If you are interested in learning more about investor-owned hospitals, the following 2 sources should be helpful.

Jeff C. Goldsmith, **Can Hospitals Survive?** (Homewood, Ill: Dow Jones-Irwin, 1981). A very readable book of fewer than 250 pages, **Can Hospitals Survive?** provides a good overview of the hospital industry, both profit and nonprofit. It suggests strategies for survival and presents a believable picture of what the field will be like for the next 5 or 10 years.

Modern Healthcare (Chicago: Crain Communications). A monthly trade publication dealing mainly with investor-owned hospitals and nursing homes, **Modern Healthcare** includes a comprehensive survey of nonprofit and for-profit multihospital systems each spring. Each summer, it does the same for nursing homes.

Hospital Reimbursement and Indigent Care: The Costs of a Nonpolicy

By Philip Jacobs and Greg R. Alexander

The phenomena of escalating hospital costs and charges have been with us for well over a decade. Until recently, the focus has been on the continuing rise in hospital **expenses** as the dilemma to be resolved. This problem was closely tied to public policy via the federal Medicare and joint state-federal Medicaid programs, which paid for roughly 32 percent of all admissions in South Carolina, and via county governments, which paid for **some** indigent care, thus filling part of the gaps in coverage not included in the two Medi-programs. But, while the problem of rising hospital expenses has not disappeared, with the retrenching of medical subsidy programs by all levels of government an additional problem has emerged: the shifting of burdens of payment among major payer groups from government programs and nonpaying patients chiefly to patients with private insurance. In this article, we will present the background of this development and identify several alternative policies for dealing with the issue. Then, using a simple simulation model, we will estimate the cost of present and possible future policies to the "typical" family holding a hospital insurance policy.

THE SETTING

The background of hospital reimbursement that has developed in the postwar years is extremely complex. A simplified picture of the flow of funds is presented in Figure 1. Here, each patient group is linked to one, or several, payment sources. Patients are grouped according to payment source, as follows: private insurees (patients covered by Blue Cross or other private insurance carriers), who make up roughly 56 percent of patients state-wide; self-pay (uninsured) patients, who make up approximately 7 percent of all patients; patients whose payments come from the joint state-federal Medicaid program, comprising 10 percent of all patients;

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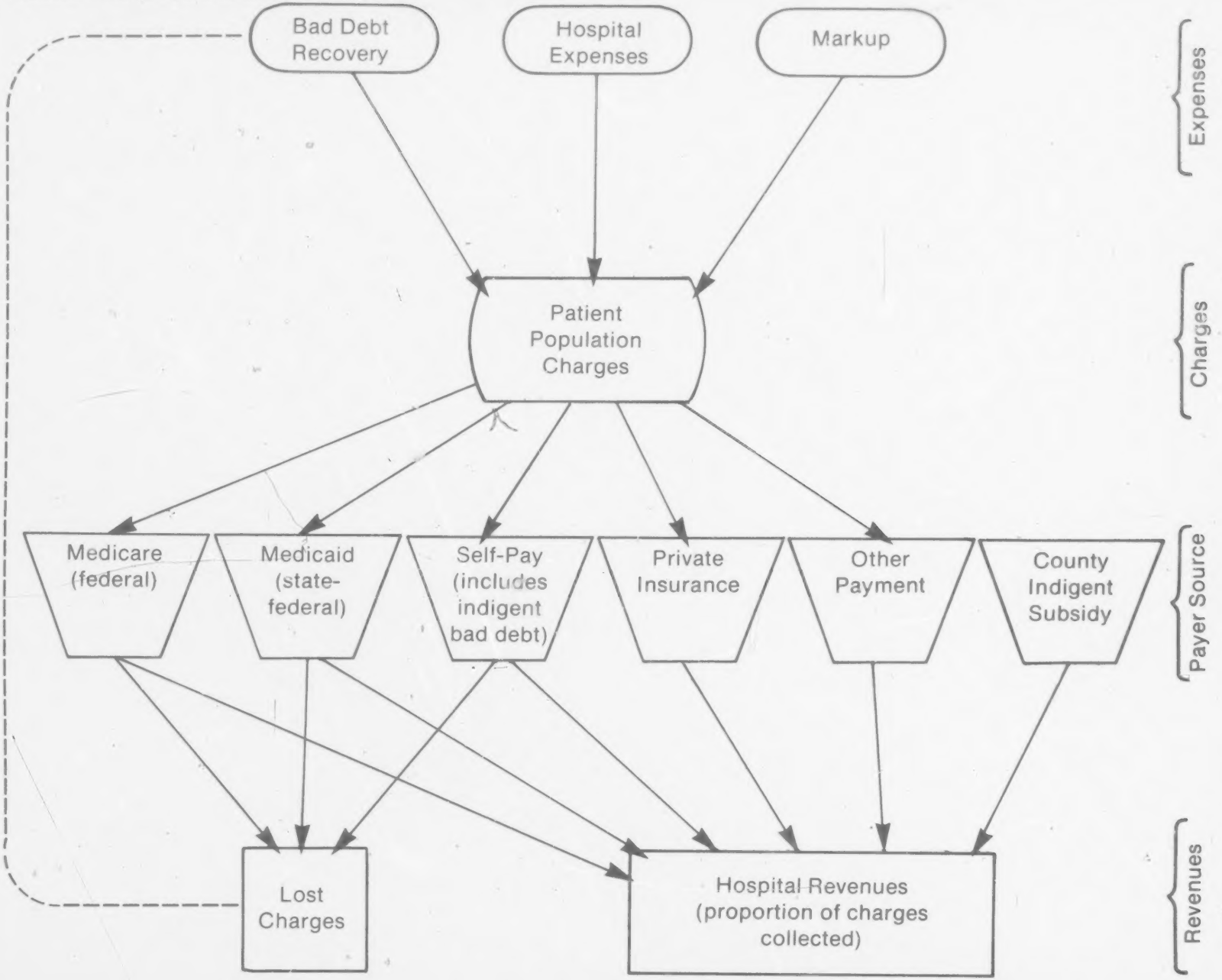
Greg R. Alexander is a Biostatistician in the Department of Preventive Medicine and Community Health at The University of South Carolina School of Medicine. He earned a B.S. Degree in History from the College of Charleston and a Master of Public Health Degree from The University of South Carolina. Alexander is currently Vice-President of Mu Chapter of Delta Omega Honorary Public Health Society and is certified as a Registered Sanitarian in South Carolina. He has also authored or coauthored a number of articles pertaining to health problems in South Carolina.

FIGURE 1. Hospital Reimbursement Diagram



patients whose payments come from the federal Medicare program (primarily for those over 65) and who make up 22 percent of all patients; and all others.[1] A major problem is that hospitals do not receive uniform reimbursements from all sources.

Hospitals refer to their prices as "gross charges." These charges are set by applying a given "markup" over expenses in order to achieve a target level of profits. Insurance companies (including Blue Cross in South Carolina) reimburse hospitals on the basis of charges on behalf of their insurees. Self-pay patients are "expected" to pay out of pocket on the basis of gross charges as well, but so many of these end up as bad debt cases that some other group must make up for the losses they incur. Medicaid, a joint state-federal program, pays an amount determined by a complex formula based on the expenses hospitals incur for Medicaid patients **alone;** any reimbursement to help meet bad debt losses is ruled out. Medicare has paid on a similar basis, also ruling out any payments to defray bad debt losses. The major source to which hospitals have recourse to raise enough revenues to earn the target profit rate, then, is private insurance revenues (which ultimately mean higher insurance premiums).

Several problems complicate this payment maze. First, Medicare and Medicaid have been paying since 1966 on the basis of expenses incurred (retrospective basis), thus rewarding hospitals with larger government revenues if their expenses are higher. While these groups may not pay their "fair share" of the pie, then, they have encouraged the pie to grow. Recently, the federal government has moved to reimburse hospitals for Medicare patients on the basis of a fixed amount per case, with the amount being based on base year costs in similar types of hospitals. There has been concern in the hospital industry that this payment basis will not be enough to rectify the indigent care problem, but it is still too early to tell what effects the new policy will have. Second, due to the post-1981 leveling off in the growth of Medicaid funds (see Figure 2), the Medicaid program has cut back in the number of days it will pay annually for its enrollees. Currently, it pays for up to 12 days inpatient care for its enrollees. Above this, recipients cease being Medicaid's responsibility and become responsible for their own debts. In 1981, this restriction meant that about a quarter of the days of inpatient care being used by Medicaid recipients went unpaid.[2]

THE PROBLEM

In addition to Medicaid cutbacks, about 7 percent of all inpatients are self-pay. Of these, up to 85 percent have been estimated to be "bad debt" individuals.[3] It is a policy issue of some concern as to who is responsible for these patients' bills. Medicaid, a program designed to pay for medical care for the poor, has restrictions on eligibility and leaves many uncovered who fully qualify as indigents. Further, with Medicaid cutbacks this number will grow. Traditionally, county governments have assumed some responsibility for the medical bills of their **resident** indigent. Such aid is not automatic, however, and rarely covers anywhere near the full cost of treatment. Further, with growing hospital specialization, indigent patients often cross county lines, and no mechanism exists to fund out-of-county indigent care.

Under current budgetary conditions, there is little likelihood of state government committing itself to a new program. Therefore, higher payments from private insurees is the only avenue left to hospitals to cover bad debts, and this has been the one taken.

EFFECTS OF POLICY ALTERNATIVES

A model was set up that estimated the effects of several conceivable policy responses on (a) the average gross charge per inpatient stay and (b) the "typical" full annual insurance premium of a family of four for complete inpatient coverage. These variables were estimated for Columbia area hospitals under four sets of policy responses, given 1981 conditions. Patient numbers were assumed constant from situation to situation (a simplification that will be discussed presently). Overall, the "value" of bad debt cases for all four area hospitals was about $6.5 million, while the county subsidies for indigent care were just over $3 million. With this background, estimates were made for 4 policy cases (see Table following).

Case 1. The "Base" Policy

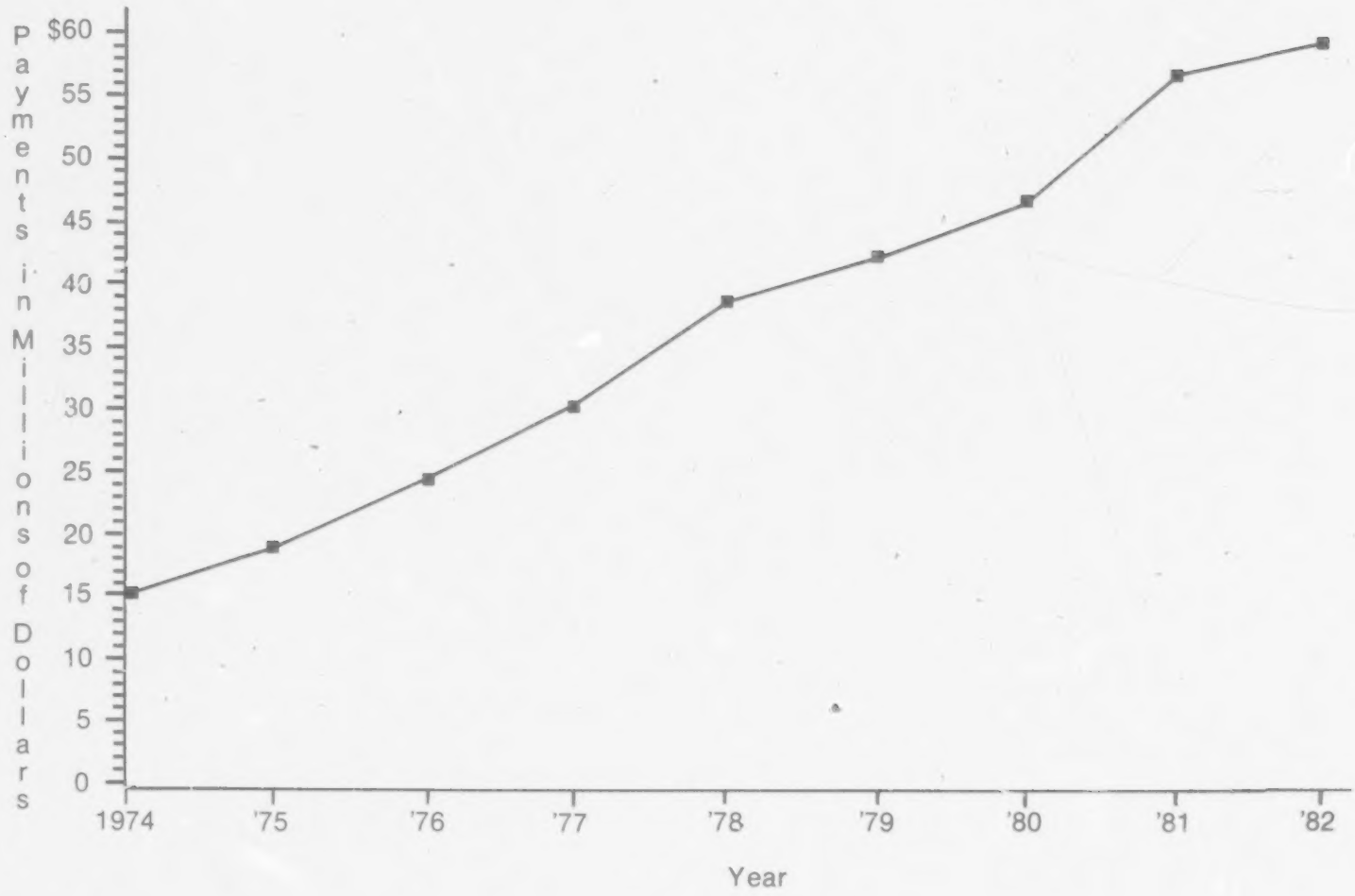
With no Medicaid limitations, and county subsidies at 1981 levels, hospitals would charge

[1]The topic of this article was suggested by the late Jim Black, Editor of this publication, who was very helpful to us while we were preparing it. We would like to express our appreciation for his cooperation and encouragement.

[2]South Carolina Hospital Association and South Carolina Hospital Financial Management Association, **South Carolina Hospital Income and Cost Shifting Study** (Columbia, SC: South Carolina Hospital Association, December 1981).

[3]Unpublished data, South Carolina Department of Social Services.

FIGURE 2. Annual Inpatient Hospital Payments, South Carolina Medicaid Program, 1974-'82



Source: South Carolina Department of Social Services.

$1,675 per case in order to meet an hypothesized target markup of 2 percent. This charge implies an annual insurance premium rate of $1,031 for full inpatient hospitalization coverage of a "typical" family of four. (Employers typically pay some or all of this.)

Case 2. Medicaid Cutbacks

If Medicaid cases reimbursing for all hospital care above 12 days per enrollee per year, and if total inpatient days for enrollees stays the same, the hospitals must raise charges to $1,731 to meet their target markup, to be financed by an increase in insurance rates to $1,066. Thus, the Medicaid cutbacks increased the burden of bad debts which falls on purchasers of private insurance: annual premiums rise by $35 per family. This may be a high estimate because some of the "cutback" policy might deter Medicaid enrollees from seeking additional care as indigents. In this case, total hospital patient numbers will fall, so that overall hospital revenue needs and hence charges will be somewhat less.

Case 3. County "Fair Share" Subsidies

Given the same Medicaid cutbacks as in Case 2, but a policy that stipulates that each county pay full charges for all its **resident** indigents, hospital charges would fall to $1,663 and premiums to $1,024. Of course, out-of-county indigents would not be "covered" by this plan.

Case 4. A State "Indigent" Policy

If the state paid full charges for all its indigents, then **even with Medicaid cutbacks** charges would be $1,617 per inpatient admission and the "average" family of four "premium" would be $996. Thus, indigent care alone adds $70 to each insurance policy, holding other factors (e.g., Medicaid cutbacks) constant.

DISCUSSION

We have estimated the financial implications of several policy alternatives relating to indigent care on hospital charges and insurance premiums. The other side of the coin should also be mentioned. Hospital charges are lowered, in some cases considerably, by government picking up some of the indigent care tab. If this were to happen, taxes would have to increase, be they local property rates, state taxes, or federal taxes. The inescapable fact is that **someone** always has to pay, whether through hidden or explicit taxes. Currently, all levels of government are dodging their share of the responsibility. Therefore, the impact of their actions is being felt by purchasers of health insurance, though in an indirect way.

One might ask, "Then why worry if roughly the same people are paying for indigent care whether

TABLE. Estimates of the Effects of Four Policy Responses

Policy Cases	Charges per Inpatient	Annual Insurance Premiums For a Four-Person Family (full cost, inpatient coverage)
"Base" Policy —No Medicaid day limitations —County subsidies at 1981 levels	$1,675	$1,031
"Medicaid" Restrictions Policy —Medicaid recipients restricted to 12 days inpatient care —Everything else as in base policy	$1,731	$1,066
County "Fair Share" Policy —Counties pay full charges for **resident** indigents —Medicaid recipients restricted to 12 days inpatient care	$1,663	$1,024
State "Indigent Responsibility" Policy —State pays full charges for resident indigents —Medicaid recipients restricted to 12 days inpatient care	$1,617	$ 996

Source: Data for the equations were obtained from **S.C. Hospital Income and Cost Shifting Study** (ref. 1); **Hospital Statistics 1981** (American Hospital Association); U.S. Department of Health and Human Services, **Current Estimates From the National Health Interview Survey: United States 1980** (Washington, D.C.: Government Printing Office, 1981); and **Discharges From Short-Term Nonfederal Hospitals, South Carolina 1979** (South Carolina Cooperative Health Statistics System, Columbia, SC, 1979).

The estimation was done through a series of equations that calculated charges per inpatient as the revenue needs from charge-based patients, divided by the estimated number of paying charge-based patients. Indigent patient numbers were estimated from the South Carolina Hospital Association survey for government and nongovernment hospitals separately. Overall revenue needs included a target markup of 2 percent. Revenue needs from paying charge-based patients was estimated by deducting Medicare, Medicaid, other revenues, and county appropriations from overall revenue needs. Medicare and Medicaid revenues were estimated by applying ratios of covered to total patient days to appropriate estimates of allowable costs. All data were adjusted to an inpatient-only basis. Insurance premiums were calculated by applying inpatient per capita utilization rates to the above calculated charges and allowing for a 10 percent loading charge by the insurers.

the payment is in the form of taxes or insurance premiums?" The concern arises because, while public officials appear to be "getting off" easy, they are legitimizing a market mechanism that permits the **system** to grow out of control. Hospital costs grow, and governments finance a portion (though not a "fair share") of the growth, and permit hospitals to charge off the rest to private insurance in the manner shown earlier in this article. Meanwhile, no mechanism exists for all payers to unite and agree on common charges, based on a recognized, acceptable, and desired amount of increase in hospital expenses, with each paying his "fair share." In the long run, unless overall expenses are contained, governments will end up paying more in total. Although they may succeed in avoiding some of the costs of hospital inflation through "cost shifting" or "invisible taxes", by not meeting the issue head-on with the development of a coordinated approach to hospital reimbursement, the state and federal governments are creating larger costs for themselves **and others.**

Finally, the present system imposes much heavier costs on county hospitals than on others, since they are the repositories of the indigent. Large, specialized hospitals that receive many out-of-country indigents must also charge higher rates to cover their deficits. For this reason, some of the publicized higher charges at regional medical centers are due to their unique positions as repositories of both in-county indigents and out-of-county indigents with complex medical problems. It is an issue of some public concern as to who should pay for the continuance of such centers, for it is in reimbursement policies that the future realities of regional availability of services will be decided.

Economics of Occupational Health[1]

By Alan Chovil and Greg R. Alexander[2]

INTRODUCTION

Occupational health services have developed in fits and starts over the last century under a variety of often opposing political influences. The early libertarian dogma that American workers are tough, self-reliant, and can take care of themselves has progressively come into conflict with an opposing equalitarian attitude that calls for regulation to defend the unprotected worker from capitalist exploitation. Some enthusiasm early in the century for occupational health measures was followed by a long period of relative inertia. During this time a minimal framework of regulatory control was developed, but this was really only adequate when associated with a paternalistic management that appreciated the need for a healthy work force. Fortunately, there were a number of such employers.

This state of affairs continued until the 1950's and '60's when there was an increasing awareness of the potential for mischief to workers, the general population, and the environment from the large scale manufacture and use of a multitude of new pesticides, petrochemicals, and plastics. This resulted in a call to restructure the approach to environmental and occupational health and safety problems and the birth of the Occupational Health Safety Act (OSHA) in 1972. Benign, but rather patchy, paternalism was replaced by detailed regulations which, while they may have been largely effective in achieving broad aims, tended to

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[1]The survey from which the data reported were drawn was greatly assisted by support from Blue Cross and Blue Shield of South Carolina and a financial grant from E. I. Du Pont de Nemours.

[2]For a photo and biographical sketch of Alexander, see p. 13.

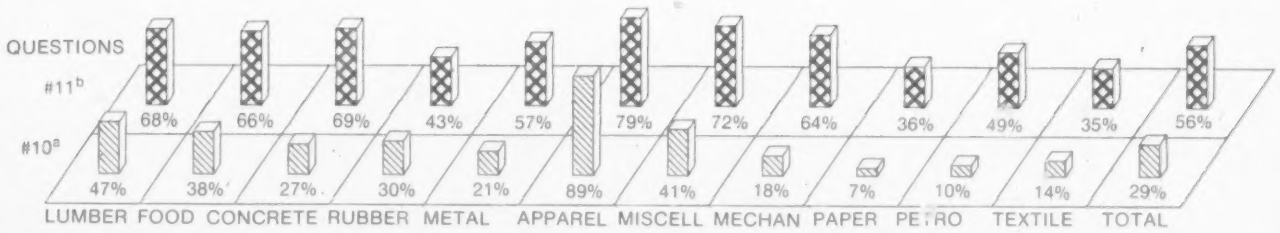
bog down in nit-picking detail (according to industry spokesmen).

The most recent phase has been initiated under the Reagan Administration with the theme of de-emphasizing rigid regulatory applications which are to be replaced by negotiated individualized solutions for occupational health and safety problems. While initial reports are favorable, only time will tell if this approach is adequate.

Coinciding with changes in the political climate, two other factors quite independent of each other have come into prominence lately to affect attitudes toward occupational health. One is the wave of enthusiasm for personal health and fitness promotion that has swept the nation. The other is the growing concern that health care costs are spiraling out of control, coupled with the realization that such costs, through fringe benefit packages, ultimately are a direct charge against industry, which must pass it on to the consumer.

This is, therefore, a logical time to take stock of present occupational health practices and to review their potentials for economically sound development into areas that may impinge on both personal fitness and health care costs. Data have been scanty or absent on the extent of existing services, except for the anecdotal accounts of individual companies reported in the media and a single survey in 1972 carried out by the National Institute of Occupational Safety and Health (NIOSH).[3] (An update of the NIOSH survey is currently in progress, but is limited to a sample of the national industry.) In order to obtain data on existing services the Department of Preventive Medicine and Community Health of the School of Medicine at The University of South Carolina carried out a survey by mail of manufacturing industries with more than 50 employees in South Carolina in the spring of 1982. A concise — hopefully noncontroversial — questionnaire was sent to the managers of 1,202 individual plants. Replies were received from nearly 60 percent, representing 72 percent of the work force in the industries surveyed. Some of the data which have been analyzed both in terms of the product Standard Industrial Classification code (SIC) and in terms of plant size, will be presented and reviewed from a viewpoint of the potential economic costs and benefits of occupational health services. Further, 6 textile and 2 paper companies representing 91 individual plants supplied single corporate responses.

FIGURE 1. Percentage of Negative Responses to 1982 Occupational Health Survey (South Carolina Plants >50 Employees)



[a]Q #10: Do you require new employees to take a preemployment medical exam?
[b]Q #11: Do you require employees to take a medical exam on return to work after sickness or on termination?

The primary level of occupational health care is the provision of those services mandated by law. These include care under Worker's Compensation laws to workers injured on the job and the maintenance of employee health records and other requirements under OSHA regulations. Our data revealed that fewer than 5 percent of the responding industries indicated any problems in complying with OSHA regulations or obtaining efficient treatment of injured workers which may be taken as confirming that primary level services are available.

A secondary level of occupational health care can be considered as those measures mainly intended by management to be cost beneficial in maintaining production through control of absenteeism. If there is an established infrastructure for primary care, such measures may even be profitable and at least tend to mitigate the costs of mandated services. We measured the deficit in these services

[3]U.S. Department of Health, Education, and Welfare (NIOSH), **A Nationwide Survey of the Occupational Safety and Health Work Force,** (Pubn. N (Washington, D.C.: Government Printing Office, 1978), 78-164.

in terms of the employers **not** providing pre-employment physical exams. The data are presented visually in Figure 1 by SIC categories (see table). The ranking used was developed to reflect the differences in plant size associated with the various industries. Overall, 29 percent of the plants did not provide pre-employment exams, with a range from 89 percent for apparel to 8 percent for paper. Similar patterns are seen for return to work exams. For both exams, the usage increased with plant size.

The third level of occupational health care involves the provision of services directed to early detection, and more efficient management, of chronic disease, or to the prevention of disease by actual promotion of better health through life style improvements. This is the area that is currently provoking great interest because it has the apparent potential benefits to management not only of improving productivity but also — and possibly more significantly — of offering a hope of reducing the costs of health care benefit packages.

The measures we queried relating to this third level of service can be divided (somewhat arbitrarily) into those directed primarily to disease control — health screening (for hypertension, etc.), alcohol and drug abuse control, and smoking cessation; and those involving general health improvement through life style changes such as dietary advice, stress counseling, and programs for physical fitness. Both categories are shown in Figure 2 which demonstrates clearly the relationship between size of plant and frequency of any program. In this figure companies that supplied corporate responses are shown as a separate *category*. These data reveal how *weak acceptance* of any of these programs is, even in the large plants. Other than health screening (for which the type was unspecified), only alcohol abuse control stands out with even a modest level of general interest. There was considerable interindustry variation, somewhat similar to that shown in Figure 1, which may not be wholly related to plant size. Paper (SIC 26) led with interest in alcohol (41 percent), stress (22 percent), and fitness (22 percent) programs; Petroleum and Chemicals (SIC 28 and 29) led in diet (14 percent); and Textiles (SIC 22) showed the highest level for screening (57 percent) programs. Except for alcohol control programs, Lumber (SIC 24), Food (SIC 20), Concrete and Stone (SIC 32), and Apparel (SIC 23) had programs in fewer than 10 percent of any areas of health promotion considered.

FIGURE 2. Percentage of South Carolina Industries >50 Employees Providing Employee Health Promotion Programs

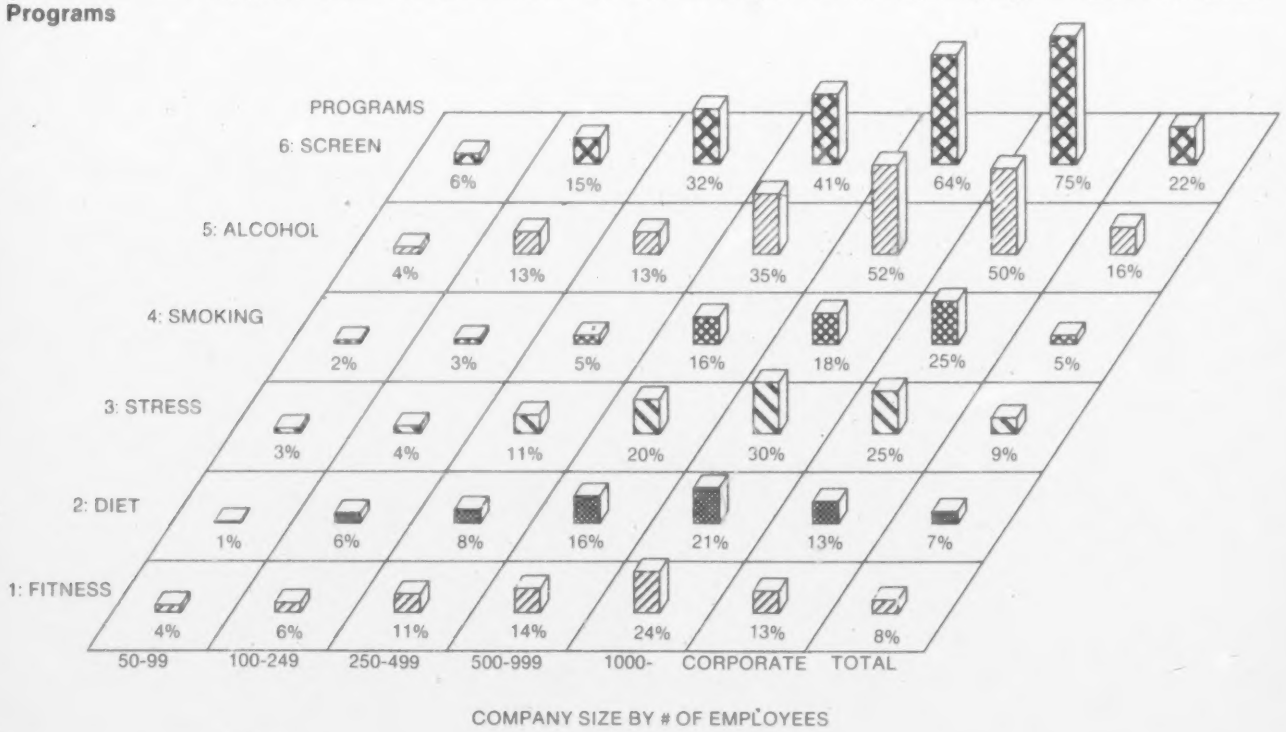


TABLE. Standard Industrial Classification Code Key

Title	SIC	Plants Responding	Description
Lumber	24.	46	Lumber and wood products except furniture.
Food	20.	35	Food and kindred products.
Concrete	32.	26	Stone, clay, glass, and concrete products.
Rubber	30.	37	Rubber and miscellaneous plastic products.
Metal	33-34.	63	Primary metal industries. Fabricated metal products except machinery and transportation equipment.
Apparel	23.	72	Apparel and other finished products made from fabrics and similar materials.
Misc.		64	All other industry.
Mechan.	35-36.	109	Machinery except electrical. Electrical and electronic machinery equipment and supplies.
Paper	26.	27	Paper and allied products (not including printing and publishing).
Petro.	28-29.	51	Chemicals and allied products. Petroleum refining and related industries.
Textile	22.	187	Textile mill products.

DISCUSSION

The costs of supplying primary levels of occupational health care are basic expenses of operation of any industry. These may be reducible by increasing the cost effectiveness of delivery but, being a mandated expense, they cannot be considered in terms of cost benefit. In contrast, secondary levels of service may be cost beneficial. This aspect has been discussed in detail elsewhere.[4]

The third level of occupational health care — which we see somewhat poorly developed in South Carolina industry — has the greatest potential for benefit to workers and industry. The economic potential of specific work site disease control programs is already solidly established. Alcohol abuse programs have long been demonstrated to be cost beneficial.[5] A recently published paper in the **Journal of Occupational Medicine (JOM)** by Canadian authors[6] shows the cost benefits of an in-house hypertension detection and follow-up program, in comparison with reliance on private practice, and suggests that it is probably also cost effective in the long run. Dr. Donald Hayes, Medical Director of Burlington Industries, speaking at the 1982 Southeast Occupational Health Conference in Winston-Salem, quoted a solid estimate that it costs his industry $580 per head per year to employ a smoker in terms of smoking related illness and other effects. Fielding, also writing in **JOM**,[7] reviews the documented effectiveness and cost benefits of a number of programs including smoking cessation, hypertension control, physical fitness, and weight management. The documentation of benefits is less secure for those programs we characterized as directed to health promotion by improved physical fitness, than for those directed to disease detection, but there is a strong intuitive of probability of benefit, when we consider the goal to be reduction in over all health care costs.

A cautious management will not rush into unproven expensive programs (but we have shown evidence that South Carolina industry is failing to take advantage of secondary occupational health measures known to be economically sound). With any tertiary level occupational health measures that may be introduced, care is necessary to insure that any benefits are in terms of real health

[4]Philip Jacobs and Alan Chovil, "Economic Evaluation of Corporate Medical Programs," **Journal of Occupational Medicine** (in press).

[5]F. E. Asme et al., "Twenty-Five Years of Rehabilitation of Employees With Drinking Problems," **Journal of Occupational Medicine** 22 (April 1980): 221-24.

[6]A. G. Logan et al., "A Comparison of Community and Occupationally Provided Antihypertensive Care," **Journal of Occupational Medicine** 24 (November 1982): 901-6.

[7]J. E. Fielding, "Effectiveness of Employee Health Improvement Programs," Ibid., 907-16.

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Daniel International
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Deloitte, Haskins & Sells
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Fidelity Federal Savings & Loan Assoc.
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First Federal Savings & Loan Assoc. of Charleston
First National Bank in Orangeburg
First National Bank of S.C.
First Palmetto Bank & Trust
Fluor Corp. (Daniel International)
Frances Ley Springs Foundation, Inc.
Geiger, McElveen & Kennedy
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General Telephone & Electronics Corp.
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Greenwood Mills
Greenwood Packing Company
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Lexington County Savings & Loan Assoc.
The Liberty Corporation
Lips Doran
Lockwood-Greene Engineers
MacEwen and McGregor
Mayfair Mills
C. C. McGregor & Company
Merrill Lynch, Pierce, Fenner & Smith, Inc.
Multimedia, Inc.
Mutual Savings & Loan Association of Greenwood
National Bank of South Carolina
North Carolina National Bank
Oneita Knitting Mills
Owens Corning Fiberglas Corp.
Peat, Marwick, Mitchell & Company
Peoples Federal Savings & Loan Association
Price Waterhouse & Company
Reeves Brothers, Inc.
Republic National Bank
Richtex Corporation
Riegel Textile Corporation
Security Federal Savings & Loan Assoc.
Seibels Bruce & Company
Self Foundation
Singer Foundation
J. E. Sirrine Company
Smith, Sapp & Company
Sonoco Products Company
S. C. Electric & Gas Company
S. C. Federal Savings & Loan Association
S. C. National Bank
Southern Bank & Trust Company
Southern Bell Telephone & Telegraph Co.
Spartan Foods
Springs Mills, Inc.
Standard Federal Savings & Loan Association
Standard Life
State-Record Company
Synalloy Corporation
Union Carbide Corporation
Uniroyal, Inc.
U. S. Shelter Corporation
W. R. Grace
Wachovia Bank & Trust Company
Wellman Industries, Inc.
Westinghouse Educational Foundation
Wilbur Smith & Associates

change. This calls for comprehensive preplanning before any programs are introduced so that they can be geared to specific management and societal objectives. Any plan must contain mechanisms for regular evaluation. Because many objectives are achievable only over a period of years, a commitment for an adequate time period is absolutely essential if a program is to be of value. Stepped introduction of different health measures over time, or rapid initiation of a complete program, are equally feasible — although the former may be more attractive to cautious financial managers. Stepped introduction should, however, be based more on logical goals in terms of health benefits (and resulting dollar savings) than consideration of public relations, labor relations, and/or shareholder interest.

Following the much publicized lead of some Fortune 500 companies, which have embraced extensive health care programs at considerable costs, there has been a proliferation of entrepreneurial activity in making a variety of packaged health promotion programs available to industry. It is also known that in South Carolina a number of hospitals and other agencies are vying to devise and market health promotion programs to industry and individuals. It is questionable how solidly rooted many such programs are in the scientific disciplines of preventive medicine, or whether they can ever be subject to a valid evaluation of their real effects. Almost any measures taken by management that demonstrate interest in the worker can produce a temporary positive effect. This is known as the "Hawthorn effect" and is the equivalent of the medical "placebo" effect.

Size of operation need not be a barrier to the introduction of health promotion programs in industry. While it is undoubtedly easier for large corporations to establish programs, it is perfectly feasible for smaller plants, taking advantage of community resources, to realize substantial benefits.

CONCLUSIONS

We must conclude from our data that so far, industry in South Carolina has not taken full advantage of the economic benefits that can accrue from well-designed occupational health programs. While caution is necessary in the still unproven, but high profile, areas of health promotion, where entrepreneurs are particularly active, this is a field where carefully planned programs — based on the scientific evidence that forms the basis of preventive medicine — should be able to produce an improvement in the health of the worker (and his family) that will also be of economic value to management in terms of both productivity and, even more importantly, restraint of spiraling costs of health care packages.

As evidence continues to come in regarding the economics of occupational health programs, these practices, still largely considered as merely desirable solely for the maintenance of a worker's health for the pursuit of happiness, may well prove to be a practical and just aid in management's economic endeavors.

Self-Care Health Behavior Within South Carolina Families: A Comparison of 1978 and 1980 Findings

By Alan D. Bauerschmidt, Leanne Corda McGrath, and Judith W. Alexander

INTRODUCTION

In December 1978, families on The University of South Carolina's College of Business Administration Consumer Panel were asked to provide information about their self-care health maintenance and promotion activities. The purpose of the query was to determine how involved families in this state were in the self-care phenomenon that was becoming more prevalent throughout the nation. A further objective was to gain understanding of the likely impact of this trend on the health care industry in South Carolina. The results of this 1978 study are being published in monograph form by the USC College of Business Administration.*

A follow-up survey was conducted in December 1980 to gain additional information. The purpose of this article is to report the preliminary findings of the later study and to comment on the correspondence in replies to the basic questions included in both studies.

The findings reported here include comparisons between approximately 650 families responding in 1978 and nearly 750 families responding in 1980. In addition, 400 families can be directly compared with respect to changes in their individual responses to the 2 queries because they answered both sets of questions. It is important to note that the approximations reported above are the result of some questions' either not being answered by some respondents or being inapplicable to their respective situations. Exact counts of respondents to the particular questions are presented in the results detailed below.

The basic areas of self-care and health care concern included in the two questionnaires were nutrition, exercise, self-medication, stress management, environmental health hazards, smoking, overeating, and the use of seat belts. In addition, comparative information on self-perceived health status is available from both surveys. Some variation in the way questions were expressed in the two surveys was encountered, and those are explained in the presentation that follows. These variations generally were the result of insights' obtained from the original survey being used to improve the gathering of data in the second survey.

Dr. Alan D. Bauerschmidt is Professor of Management in the College of Business Administration at The University of South Carolina. A retired Lt. Commander in the Medical Service Corps of the United States Navy, Dr. Bauerschmidt holds a Ph.D. Degree in Business Administration and Economics from the University of Florida. He is coauthor of 2 monographs, **Forecasted Changes in the Health Care Industry** and **Self-Care in South Carolina** (OCCASIONAL STUDIES No. 3 and No. 15, respectively, USC College of Business Administration) and author or coauthor of over 30 professional articles and papers. Dr. Bauerschmidt also has done extensive research and consulting work on a state and national level in the health care field, and has served a 4-year term as a member of the Health Resources Administration's U.S. National Committee on Vital and Health Statistics.

Mrs. Leanne Corda McGrath is a doctoral candidate in Health Care Management in the College of Business Administration at The University of South Carolina. She earned a B.S. Degree in Pharmacy, an M.S. Degree in Pharmacy, and an M.B.A. Degree from The University of South Carolina. Mrs. McGrath is a Registered Pharmacist and has worked in both the practicing and instructional areas of pharmacy.

FINDINGS

The basic information obtained from respondents to both surveys concerning nutrition involved the knowledge families perceived themselves to have with respect to the nutritional value of foods and the relative safety of food items. One question was asked in the 1978 survey to plumb perceived knowledge of the nutritional value of food items, while a separate question asked how well-informed the family believed itself to be about the safety of food items. Analysis of the 1978 data revealed no appreciable differences in responses to the two questions within families; therefore, a single question was included in the 1980 survey that encompassed both aspects of perceived nutritional knowledge. This asked how well-informed about the nutritional value and safety of food products was the person in the family who had the primary responsibility for buying food. The responses to this question were compared with the responses to both nutrition questions on the 1978 survey, and the results were quite similar for each. Thus, comparison was made between responses to the nutritional value question in 1978 and the broader question in 1980.

Nutrition

Families responding in 1980 appeared to believe themselves better informed about nutritional values and food safety than those responding in 1978, and this difference was statistically significant ($p < .000$). Table 1 indicates the number and proportion of families in each study who perceived themselves to be relatively uninformed about such matters, informed at a level comparable to the average family, or relatively more informed than others. It should be noted that most families considered themselves well-informed in both surveys.

This upward shift in perceived knowledge about food items was not simply a matter of different

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TABLE 1. Perceived Knowledge of Nutritional Values and Food Safety, 1978 and 1980

Degree of Perceived Knowledge	1978		1980	
	Number	Percentage	Number	Percentage
Uninformed	58	8.8%	32	4.1%
Average	196	29.4	195	24.6
Well-Informed	412	61.8	567	71.3
Total	666		794	

families responding to different surveys. Over 400 families responded to each questionnaire, and a significantly large proportion indicated a greater knowledge of nutritional value and safety of food items ($p. < .000$) the second time. Fewer families reported a lowered knowledge, while a considerable proportion reported the same level of knowledge.

Exercise

In both surveys male and female adults were asked if they had a regular exercise program. There was a significant difference in responses between the 2 queries ($p. < .000$). However, these findings must be qualified because of a difference in the way the question was asked. In 1978, the exercise question asked if a regular program were followed more than once a week. This inferred a program followed at least twice a week. In 1980, the question was more rigorously defined as a regular exercise program of at least 3 times a week for a minimum of 20 minutes each. As revealed in Table 2, the

TABLE 2. Presence of a Regular Physical Exercise Program, 1978 and 1980

Responses	1978		1980	
	Number	Percentage	Number	Percentage
Have a Regular Program	504	38.9%	455	31.0%
Do Not Have a Regular Program	791	61.1	1,013	69.0
Total	1,295		1,468	

percentage of respondents answering positively decreased in 1980 by over 8 percent. It is interesting to note that when male and female

TABLE 3. Female Use of Self-Medication, 1978 and 1980

Degree of Usage	1978		1980	
	Number	Percentage	Number	Percentage
Little Use	300	45.5%	342	44.5%
Average Use	246	37.3	308	40.0
Extensive Use	113	17.2	119	15.5
Total	659		769	

responses in both 1978 and 1980 were analyzed separately, no significant difference between the sexes was seen.

Generally, respondents who replied to both surveys continued their regular exercise program between the 2 study periods. Further, 18.8 percent discontinued a regular program while only 10.4 percent began one. Even accounting for the possible impact of a more vigorous question in 1980, this seems a noteworthy finding in today's world of increasing emphasis on self-care and physical fitness.

TABLE 4. Male Use of Self-Medication, 1978 and 1980

Degree of Usage	1978		1980	
	Number	Percentage	Number	Percentage
Little Use	318	50.6%	360	50.7%
Average Use	213	33.9	234	33.0
Extensive Use	97	15.5	116	16.3
Total	628		710	

Self-Medication

Both sets of questionnaires asked panelists whether the female and/or male adults in the family indulged in self-medication by using such nonprescription drugs as aspirin, laxatives, cough medicines, sleeping tablets, and other common medicinal items. Neither response associated with the female or male adult was significantly different between the two periods, as Tables 3 and 4 reveal. However, males and females did differ significantly in their pattern of usage reported in 1980 ($p < .016$), but not in 1978 ($p < .185$).

Significant proportions of both female and male adults revealed changes in the extent of their use of self-medication between the two survey periods ($p < .000$). As might be suspected from the difference in male and female responses to this question in 1980, the pattern of change in usage was significantly different ($p < .000$). Further, more males and females increased self-medication than decreased.

Stress Management

Both the 1978 and 1980 surveys asked if the panelist were involved in such practices as yoga, meditation, hobbies, or massage specifically to help with stress management. The responses for each year are reported in Table 5. A significant difference ($p < .002$) between the two periods exists.

TABLE 5. Involvement in Stress Management Practices, 1978 and 1980

Degree of Involvement	1978		1980	
	Number	Percentage	Number	Percentage
Little or No Involvement	574	44.5%	745	50.3%
Average Involvement	441	34.2	419	28.3
Extensive Involvement	274	21.3	318	21.5
Total	1,289		1,482	

A somewhat unexpected finding was the shift in 1980 of approximately 6 percent from average to little or no involvement in stress management techniques. Separating male and female responses for 1978 revealed no significant difference between the responses of the two sexes, but for 1980, it showed a significant difference ($p < .000$). Further comparison revealed that male responses in 1980 significantly differed from male responses in 1978 ($p < .000$). Female responses during the same time period did not change significantly. The male responses in Table 6 revealed a dramatic shift of males from average to little or no involvement in stress management practices.

TABLE 6. Male Involvement in Stress Management Practices, 1978 and 1980

Degree of Involvement	1978		1980	
	Number	Percentage	Number	Percentage
Little or No Involvement	292	46.4%	410	57.7%
Average Involvement	204	32.4	169	23.8
Extensive Involvement	133	21.1	131	18.5
Total	629		710	

An explanation of this shift is found by analyzing the replies of panel members who responded to both surveys. A nonsignificant difference existed between the male and female responses. Males showed less increase in effort to practice stress management techniques than did females. However, the percentage of males and females exhibiting less effort in stress management practices was approximately equivalent. This suggests that males who joined the panel between 1978 and 1980 were primarily responsible for the shift in proportion seen in Table 6.

Environmental Health Hazards

One of the more dramatic findings in this comparative study was the substantial increase in reported concern with environmental health hazards. In 1978, the panelists were asked the degree to which either of the adults in the family was actively concerned with such environmental hazards as air and water pollution, radiation, and excessive highway speeds. Essentially the same question was asked of both the male and female adults in the 1980 survey. These later responses were combined to permit comparison with the single response in 1978. The results, which showed the significant difference ($p < .000$) between the two periods, are revealed in Table 7.

TABLE 7. Active Concern With Environmental Health Hazards, 1978 and 1980

Degree of Concern	1978		1980	
	Number	Percentage	Number	Percentage
Little Concern	324	48.6%	491	34.4%
Average Concern	227	34.0	572	40.0
Extensive Concern	116	17.4	365	25.6
Total	667		1,428	

Smoking

There was a surprising increase in the number of female and male adults reporting a personal smoking problem over the two-year period. The years between 1978 and 1980 were supposed to be ones in which adult smoking declined in the United States; yet more respondents to the questionnaires indicated having a problem with attempts to stop smoking in 1980 than in 1978. It can only be supposed that more people recognized smoking as a personal problem in 1980, although both questionnaires clearly asked individuals to respond to the question only if they smoked. Table 8 indicates the number and proportion of female and male adults who reported smoking or not smoking during the two periods. The evident differences in

TABLE 8. Smokers and Nonsmokers, 1978 and 1980

Respondents	1978				1980			
	Female		Male		Female		Male	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Smokers	145	22.3%	201	32.3%	278	36.0%	290	40.4%
Nonsmokers	506	77.7	421	67.7	494	64.0	428	59.6
Total	651		622		772		718	

the male ($p < .002$) and female ($p < .000$) smoking patterns between the two periods was statistically significant for each sex.

The largest proportion of male and female smokers in both periods reported little if any attempt to deal with their problem. As Table 9 reveals, males were less likely to be working with the problem in 1980 than in 1978, although those who were so occupied were more likely to be making an extensive effort. This shift in the reported effort of males was significant ($p < .011$).

TABLE 9. Efforts to Deal With Smoking Problem, 1978 and 1980

Degree of Effort	1978				1980			
	Female		Male		Female		Male	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Little Effort	95	65.5%	136	67.7%	191	68.7%	215	74.1%
Average Effort	34	23.4	40	19.9	44	15.8	30	10.3
Extensive Effort	16	11.1	25	12.4	43	15.5	45	15.5
Total	145		201		278		290	

On the other hand, female smokers did not have a significantly different pattern of dealing or not dealing with their problem between 1978 and 1980 ($p < .106$).

Individuals who participated in both surveys and reported themselves to be smokers revealed some shift in the degree of their effort to work through their smoking problem, although the largest number of both male and female smokers continued their original pattern. Males were more likely to be dealing with the problem in the same fashion in 1980 as they had been in 1978, but the differences between male and female responses were not statistically significant.

Overeating

The number of families reporting adults with an overeating problem increased significantly in 1980 ($p < .000$). As Table 10 indicates, both female and male adults shared in this remarkable shift from majorities reporting no problem with overeating in 1978 to majorities reporting such a problem in 1980. It might be noted that there was no significant difference between the male and female responses to the question whether an overeating problem existed in 1978 ($p < .574$) or 1980 ($p < .289$).

Both males and females reporting an overeating problem in 1980 indicated similar efforts to deal with this situation as those reporting the problem in 1978. Males were less likely to report extensive effort in 1980 than in 1978, although the difference was not significant. As Table 11 shows, there was a corresponding increase in the number of males who reported little if any effort to deal with an overeating problem, although the number reporting average effort remained the same.

Those males and females who reported an overeating problem on both surveys demonstrated similar patterns of change in the degree to which they were dealing with the situation. A majority of both sexes reported a substantial change in their efforts. Although the difference was not statistically significant, females were more likely to report having increased efforts to deal with an overeating problem, while males were more likely to report a lessened effort.

The Use of Seat Belts

There was no significant change in the proportion of respondents indicating use of seat belts while driving. In the 1980 survey the question was asked of both female and male adults in the household while the 1978 survey simply asked whether the adults followed this safety practice. When the male and female responses to the question on the 1980 survey were summed and compared to the single household response of 1978

TABLE 10. Individuals Reporting Overeating Problem, 1978 and 1980

Statuses	1978				1980			
	Female		Male		Female		Male	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
No Problem	449	69.0%	438	70.4%	306	39.6%	304	42.3%
Problem	202	31.0	184	29.6	466	60.4	414	57.7
Total	651		622		772		718	

TABLE 11. Efforts to Deal With Overeating Problem, 1978 and 1980

Statuses	1978				1980			
	Female		Male		Female		Male	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Little Effort	44	21.8%	55	29.9%	110	23.6%	154	37.2%
Average Effort	77	38.1	68	37.0	174	37.3	152	36.7
Extensive Effort	81	40.1	61	33.1	182	39.1	108	26.1
Total	202		184		466		414	

(as displayed in Table 12), the similarity of the approximate 40 percent who reported using seat belts at both points in time was revealed. Further, it is interesting to note that females and males did not differ in reported use of seat belts in the 1980 survey.

Few households responding to both surveys indicated any difference in usage of seat belts between the two periods under study. Only 8.6 percent of the households had an adult member reporting usual use of seat belts in 1978 but little or no use in 1980. However, few households acquired the practice of using seat belts over the two-year period.

TABLE 12. Use of Seat Belts by Adult Members of the Household 1978 and 1980

Degree of Use	1978		1980	
	Number	Percentage	Number	Percentage
Usually Use Seat Belts	259	39.6%	599	40.6%
Seldom Use Seat Belts	395	60.4	878	59.4
Total	654		1,477	

survey. The proportion of individuals reporting below average health was quite typical of other studies utilizing a similar population.

A substantial number of adults responding to both surveys were found to have a lower reported health status in 1980 than in 1978. The proportion so reporting was greater than the proportion with an improved health status in the latter period. This was true of both females and males, with the latter indicating an insignificantly lesser proportion with improved health and a somewhat greater proportion with poorer health.

CONCLUSIONS

Self-care and concern with health status appear to have been solidly entrenched in the health practices of a considerable proportion of the families responding to the surveys studied here. These families reported an increased awareness of nutrition and food safety factors. A substantial number of adults continued regular exercise programs. The level of self-medication practice appears to have stabilized, although individuals who responded to both surveys reported some increased use of such medication. Only a slight decrease in stress management marked the otherwise favorable attitude toward self-care behavior.

One of the more remarkable findings of the compared studies was the greatly increased concern with environmental health hazards between the two periods among individuals responding to both surveys. On the other hand, more families reported individuals with a smoking problem in 1980 than

TABLE 13. Female and Male Health Status, 1978 and 1980

Statuses	1978				1980			
	Female		Male		Female		Male	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Below Average	48	7.4%	60	9.6%	64	8.3%	67	9.3%
Average	188	28.9	143	23.0	233	30.2	191	26.6
Avove Average	415	63.7	419	67.4	475	61.5	460	64.1
Total	651		622		772		718	

Self-Perceived Health Status

There were no significant differences in the statuses of health reported by male and female members of responding households on the two surveys. The largest proportion of both sexes had above average health, as Table 13 indicates. Few families reported the health of either adult to be poor or fair and, therefore, below average, on either

in 1978, with no apparent increase in effort to deal with the problem. Less perplexing was the greater recognition of overeating problems in the latter survey, with female adults showing more effort to deal with the situation. Finally, there was no increase in the use of seat belts, which might have marked a heightened perception of personal health hazards.

This study provided no evidence that increased awareness of health problems and self-care actions led to feelings of improved health status. It might be expected that much of the self-care activity could have been directed at health care problems that already existed, rather than with the objective of maintaining or gaining a superior health status. In any case, the information provided in this article should be considered preliminary, as more extensive analysis of the information provided by the two studies continues.

The Employer and Employment Laws

By James J. Baldwin, LL.D.

The Employer and Employment Laws is a regular feature. Suggestions and inquiries by readers are invited.

EMPLOYEE COMMITTEES: BE SURE THEY ARE LEGAL

One of the most interesting developments in employee relations during the 1980's will be the increased use of employee committees. These committees usually are established by employers to promote better employer-employee communications and to provide workable mechanisms for employees to use in voicing their suggestions or complaints. Not only can employee committees greatly improve a company's overall employee relations program, but in many cases they can also bring about increased productivity.

If employers are not careful about how they establish and operate these committees, though, they can violate the National Labor Relations Act (hereinafter referred to as The Act). The National Labor Relations Board (hereinafter referred to as The Board) has historically viewed many types of employee committees as "labor organizations" under The Act, illegally established and "dominated" by employers.

To understand how an employee committee can be illegal, two sections of The Act must be read together. Section 2(5) defines the term "labor organization" as

> any organization of any kind, or any agency or employee representation committee or plan, in which employees participate and which exists for the purpose, in whole or in part, of dealing with employers concerning grievances, labor disputes, wages, rates of pay, hours of employment, or conditions of work.

Section 8(a) (2) then makes it illegal for employers to dominate or support a labor organization. Since most effective employer-established committees are admittedly "supported" by management, the only legal question remaining is whether they meet the statutory definition of a labor organization.

When deciding on the legality of employee committees, The Board and the courts have sometimes been willing to apply the definition of a "labor organization" very loosely. For example, in a landmark case, **NLRB v. Cabot Carbon Co.**,[1] the United States Supreme Court held that an employee committee that met with management, handled employee grievances, and made proposals and recommendations concerning a wide range of

[1] 360 U.S. 203 (1959).

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subjects pertaining to the employment relationship was unlawful. The Court held that the committee was a labor organization because it was "dealing with" the employer regarding employee grievances and their conditions of work, and that since the company established and supported the committee, it was unlawful.

The statutory definition of a labor organization was broadened further by subsequent cases. Thus, employee committees were found to be illegally supported or dominated labor organizations even though they contained no formal organizational structure, by-laws, or membership requirements.[2] To illustrate, in **Erie Marine, Inc., Division of Litton Industries,**[3] the employer established a "communications session committee." The committee consisted of one employee from each department, and members served for one quarter. Management chose a retiring member's replacement. At meetings, such topics as wages and performance reviews were discussed. Both The Board and the court found the committee to be illegal.

Normally, if an employee committee system is found to be unlawful, The Board's remedy is simply an order requiring the employer to cease dealing with, and to disestablish, the committee. However, the finding of an illegal employee committee may be much more serious if it occurs in the midst of a union organizing campaign. Such a violation could cause an election won by the employer to be set aside. Moreover, under some circumstances, an illegal committee system could form a partial basis for the issuance of an order against the employer, requiring it to bargain with a union regardless of the outcome of an election.

Employers should be encouraged to know that not all employee committees are illegal. In several recent Board cases, employee committees were found not to be labor organizations. For example, in **Mercy-Memorial Hospital,**[4] the employer designated a "grievance committee" to handle employee grievances in the third stage of a four-stage grievance procedure. The employees voted for members, and the committee itself ruled on grievances filed by employees. The Board found the committee not to be a labor organization because it did not "deal with" the employer. According to The Board, the committee was created to resolve disputes "not by presenting to or discussing or negotiating with management but by itself deciding the validity of employee complaints."[5] Similarly, in **General Foods Corp.,**[6] The Board found "teams" or "work crews" not to be labor organizations because they were administrative subdivisions of the employer and did not serve other employees in a representative capacity.

A recent case by the United States Court of Appeals in Cincinnati, holding an employee committee not to be a labor organization, may signal a trend by the courts recognizing the value of such committees or similar programs. In **NLRB v. Scott & Fetzer Co.,**[7] the employer created a committee to obtain employee input on problem areas and to get their suggestions and ideas for improving operations. Employees were chosen on a rotating basis from all of the production departments. The Board summarily concluded that the committee was unlawful.[8] The court of appeals, however, disagreed with The Board by stating that it could not read the law "so broadly as to call any group discussing issues related to employment a labor organization."[9] According to the court, the fact that membership rotated indicated that employees were speaking to management more on an individual than a representative basis. The court also stated that a literal translation of the statutory definition of a labor organization would "frustrate the very purpose of The Act itself."[10]

It is interesting to note that the committee found to be lawful in **NLRB v. Scott & Fetzer Co.** is very similar to the types of committees found to be unlawful in earlier cases.[11] Thus, it is possible this recent case may provide the impetus for a more practical, and less legally technical, approach to determining whether employer-sponsored employee committees violate the law.[12] Such an approach is certainly desirable for nonunion employers who feel that employee committees can improve employee relations as well as productivity. On the matter of productivity, no case has directly addressed the legal status of so-called "quality circles," but several commentators have concluded

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[2]E.g., **Schwarzenbach-Huber Co.,** 170 NLRB 1532 (1968), **enforced,** 408 F.2d 236 (2d Cir. 1969).

[3]192 NLRB 793 (1971), **enforced,** 465 F.2d 104 (3d Cir. 1972).

[4]231 NLRB 1108 (1977).

[5]Id. at 1121.

[6]231 NLRB 1232 (1977).

[7]691 F.2d 288 (6th Cir. 1982).

[8]249 NLRB 396, 400 (1980).

[9]691 F.2d at 294.

[10]Id. at 295.

[11]Cf., **Erie Marine, Inc., supra.**

[12]Some federal agencies have recognized the benefit of employee committees. For example, the Occupational Safety and Health Administration encourages employers to create employee safety committees and rewards those employers who do so by exempting them from certain types of inspections. 47 Fed. Reg. 29025 (July 2, 1982).

that some programs of this type could be considered labor organizations illegally supported by an employer.[13]

While the **Scott & Fetzer** case certainly demonstrates that some type of employee committees are legal, employers should structure such committees carefully, keeping certain basic principles in mind. For example, an employer should avoid "dealing with" an employee committee, i.e., accepting and considering proposals for change. The committee should be a method for determining employee attitudes regarding working conditions and other problems, rather than a method by which to pursue a course of dealings or bargaining. In addition, committee membership should be continuously rotated, so that the members essentially speak for themselves, and not as representatives of their fellow employees. Further, the timing of the establishment of such a committee should not coincide with, or closely follow the advent of, union activity by employees. Until The Board and other courts have had the opportunity to analyze the **Scott & Fetzer** case, however, employers should be cautious when establishing committees or similar programs.

In the **Scott & Fetzer** case, the court noted "force in the logic" of one noted federal appellate judge who said in 1961,

> to my mind, an inflexible attitude of hostility toward employee committees defeats the act. It erects an iron curtain between employer and employees, penetrable only by . . . the union, if there is one, preventing the development of a decent, honest, constructive relationship between management and labor.[14]

Properly structured employee committees can promote a decent, honest, and constructive relationship between employers and their employees. Perhaps as important, they may also promote increased productivity, which our country now needs more than ever in view of increased foreign competition. For these reasons, The Board and federal courts should follow the more enlightened approach of the **Scott & Fetzer** case toward employee committees and rule that they are not labor organizations except in those clear cases in which they "negotiate" on behalf of other employees.

[13]Murmann, "The Scanlon Plan Joint Committee and Section 8(a)(2)," 31 **Labor Law Journal** 299 (May 1980); Note, "Does Employer Implementation of Employee Production Teams Violate Section 8(a)(2) of the National Labor Relations Act?" 49 **Ind. L.J.** 516 (1974).

[14]**NLRB v. Walton Mfg. Co.**, 289 F.2d 177, 182, 47 LRRM 2794 (5th Cir. 1961.) (Judge Wisdom dissenting.)

Bottom Lines

By James B. Edwards, Ph.D., C.P.A., C.M.A., C.I.A., C.D.P.

Bottom Lines is a regular feature that brings attention to practical business taxes and accounting. Suggestions and inquiries by readers are invited.

NOTICE OF IMPORTANT CHANGES

The "Bottom Lines" column in the December 1982 issue of this publication was written several months before its release. Since that writing, there have been several **changes** pertaining to the South Carolina state individual income tax filing requirements that apply to returns currently being filed for 1982. The following exceptions to the December issue should be **noted** and **reviewed** with your tax adviser.

1. Page 17, LINE SIX, reads: "However, there is no dividend exclusion." While this statement was **true** for **1981 tax returns**, it is **not** applicable to **1982 tax returns.** For 1982, an individual using a filing status of single, married filing separately on the combined form, unmarried head of household, or married filing separate returns may claim an exclusion of $200 against dividend and interest income. Individuals using the married filing jointly status may claim an exclusion of $400 against dividend and interest income. By the way, interest income from *All Savers Certificates* is taxable for South Carolina purposes.

2. Page 21, LINE EIGHTEEN, reads: "Such standard deduction is limited to a maximum

of $1,000 on a joint return and $500 on all others." These amounts are doubled, for 1982, to $2,000 and $1,000, respectively.

3. Page 21, LINE NINETEEN, reads, in part: "Auto license, gasoline, federal telephone, admissions and transportation tax, and employer's FICA on domestic wage are deductible taxes." Taxes that are deductible in **1982** include property, sales, and up to $500 per taxpayer in the proportion that each taxpayer's income bears to the total adjusted gross income. Taxes **not** deductible include inheritance, gift, those assessed for local benefit of a kind tending to increase the value of the property assessed, state income, excise, and those on oil, beer, wine, liquors, soft drinks, tobaccos, cosmetics, and gasoline.
4. Page 21, LINE NINETEEN, reads: "Casualty loss deductions based on the original cost of the property are deductible in full (no $100 exclusion) in miscellaneous itemized deductions." The deduction is now based on the cost or other basis or fair market value, whichever is lower. A $100 exclusion is now applicable.

Items 1-4 above are updates of items in the December column. You should also realize that there have been several other changes you need to consider. Space prohibits their inclusion here. As always, please **do not** rely on this column. Rather, consult with your tax adviser. The sole purpose of this column is to alert readers to the subjects presented.

The many notes and letters received are appreciated. They demonstrate your attention and interest. The suggestions and corrections are most helpful and your comments are respected and appreciated. Thanks!

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Labor Productivity and Employee Relations

By Robert T. Thompson, Jr.

BACKGROUND

Labor productivity, defined generally as the ratio of production volume to units of labor input, is perhaps the most widely used phrase in today's business lexicon. Every day we are exposed to more and more articles lamenting the decline in productivity growth in American business. These articles point to any number of factors that have allowed other industrialized nations to surpass our productivity growth rate. Yet, much of the literature does not reach the question of what business practices are in use in other countries, particularly Japan, but are not in widespread use in the United States, that account for this growth rate. The purpose of this article is to survey the business practices in use in Japan that have been identified as significant contributors to the continuous increase in employee productivity in that country, and to observe how similar practices may be implemented as part of employee relations programs in our business community.

As part of an industrial study mission cosponsored by the United States Chamber of Commerce and the Japan Productivity Center, I recently traveled to Japan to meet with leaders of various business and labor organizations to study those elements of Japanese business and industrial relations that account for that nation's dramatic and sustained labor productivity growth. As expected, we did not discover any immediate cures

for the problems American business faces, nor did we find an ideal system in Japan that should be emulated in every detail. What we did find was a business community and a climate which, while different from that in the United States, still employs many sound management techniques from which we can learn. Particularly in the area of quality control and employee relations, encompassing quality control circles and small group activities, Japanese business offers insight into some of our weaknesses and suggests approaches for eliminating these weaknesses and correspondingly improving our labor productivity.

At this point I feel it necessary to interject a comment about the role of Japan in our current productivity crisis. In many ways "productivity" has become synonymous with "Japanese." Due to the enormous productivity growth rate experienced by that country over the past several decades, Japan is recognized as the global productivity growth leader. Much of the literature written on the subject today would lead us to the conclusion that the only salvation for American business is to "Japanize." I do not agree with this theory nor do I give the Japanese entire credit for the system that has outpaced American business productivity growth for the past several decades.

Despite its declining productivity growth rate, this country remains the most productive nation in the world. During the 1950's and 60's, our rising productivity rate captured the attention of the business world. Executives from many countries toured the United States to learn the secret of our productivity. When they returned to their own nations, they hurried to implement American management techniques.

Japan was undoubtedly the most successful at observing American management and converting their observations into a national business philosophy. Among those aspects of American business teaching that most captivated the Japanese business community was the work of W. Edwards Deming. Deming is the business analyst who developed the theory that productivity growth is a function of improved quality. This concept has become such a cornerstone of Japanese business philosophy that the annual Deming Award was created to honor the Japanese company demonstrating the most impressive gains in quality.

This is not to say that Japan is not today's rightful leader in productivity growth. I only intend to point out that much of that nation's success comes from its enlightened implementation of American business techniques. Therefore, when we look toward Japan for guidance in improving our own productivity, we should recognize that some of what we are seeing is a system not so alien in its foundation from our own. Rather than seeking to reform our businesses in the Japanese mold, we should strive instead to recapture some of the ideas borrowed by the Japanese and used with such success. The identification of these transferable ideas was the purpose of our study mission to Japan.

INDUSTRIAL STUDY MISSION

The mission began with overviews of the Japanese industrial labor-management system and productivity movement presented by the Japan Productivity Center, the American Chamber of Commerce (Japan), Domei (Japanese Confederation of Labor), and Nikkeiren (Japan Federation of Employers' Associations), followed by observation visits to various industrial, manufacturing, and service-oriented facilities. The program emphasized the employee-oriented aspect of Japanese labor relations. The contributors identified three characteristics of this aspect of Japanese industry that are responsible for that country's success in achieving rapid economic growth and increased productivity since World War II: lifetime employment, enterprise unions, and seniority structured employment. However, after visiting and observing the various industrial facilities on the itinerary, I felt that a successful labor-management relationship, resulting in a stable work force and increased productivity, did not necessarily depend for its efficacy on the existence of any or all of these peculiar employment characteristics. This conclusion becomes more apparent on examination of these employment practices.

Robert T. Thompson, Jr. is a Partner in the Greenville, South Carolina, law firm of Thompson, Mann and Hutson, specializing in labor and employment relations law. This firm represents employers throughout the United States and has additional offices in Atlanta; Columbia; Greensboro, N.C.; Washington, D.C.; and soon in New York. Thompson graduated from college and law school at Emory University with high honors. He is admitted to the Bar in South Carolina, Georgia, and the District of Columbia, and is involved in labor law activities with the American Bar Association. He is also the author of several articles on productivity and various aspects of labor relations.

Lifetime Employment

The guarantee of lifetime employment is available to only 20-25 percent of Japan's work force, and it is generally available only during the "spring labor offensive," when major Japanese industries aggressively recruit and employ immediate male graduates. The successful graduates selected are, admittedly, guaranteed lifetime employment with their employer; however, the majority not selected lose all prospect of obtaining the guarantee and are considered lower class citizenry as a result. Nevertheless, the latter group makes up the bulk of the Japanese work force. These people are employed on a temporary or contract basis rarely exceeding one year's duration. Because of their temporary status, they are particularly vulnerable to changing economic conditions creating fluctuations in the work force that either go unnoticed or are de-emphasized in view of the stability enjoyed by lifetime employees. As a practical matter, lifetime employees probably do contribute significantly to the maintenance of enterprise loyalty, mutual sentiment, and a sense of camaraderie in the larger work forces, but since so few are chosen, it remains difficult to ascribe the success of the total labor relations program to this characteristic.

Further, the guarantee of lifetime employment is generally available only in the larger industries employing more than 1,000 persons, and it is not absolute. Lifetime employees can be discharged for gross violations of company policy or for a criminal conviction, and they are subject to employment decisions necessitated by changing economic conditions and managerial decisions. These employees can be loaned to other companies during economic slowdowns and thus remain employed; however, they can also be forced into early retirement or have their remaining work life expectancy purchased outright, presumably at an amortized figure. Therefore, while lifetime employment is significant and beneficial in those industries able to accommodate such a commitment, its practice is not so pervasive as to account for the productivity increase in Japan.

Enterprise Unions

Industrial union organization in Japan is fundamentally different from unionization as we know it. In Japan, industrial unions are organized by company, not by skill, and all contract negotiations take place with the employer. Negotiations occur annually to coincide with the spring hiring offensive, and generally center around establishment of the annual wage increase and bonus percentage. In generally all other respects, the goals of the union and the company are the same: perpetuation of the economic success of the company and the economic strength of the country. As a result, an adversary relationship so characteristic of Western labor-management relations exists to a substantially lesser degree in Japan.

As with lifetime employment, however, it is difficult to ascribe the Japanese economic success solely to this arrangement. The statistics again indicate that the great majority of Japanese workers have no union affiliation. Less than one-third of the work force is unionized, and as with lifetime employees, union membership is generally concentrated in the larger companies.

Seniority Structured Employment

The seniority system in Japan is integrally related to the lifetime employment concept. All lifetime employees hired in the spring offensive generally remain in their peer group throughout their employment. Wages are based on seniority. Employment advantages attributed to this system include suppression of individual competition among peers, rotation of employees throughout the production facility, and promotion of a sense of unity among the peer group participants. The proffered results of this practice include general personnel awareness of the complete industrial process, an increase in middle management decision making, and a decrease in traditional top-to-bottom decision implementation.

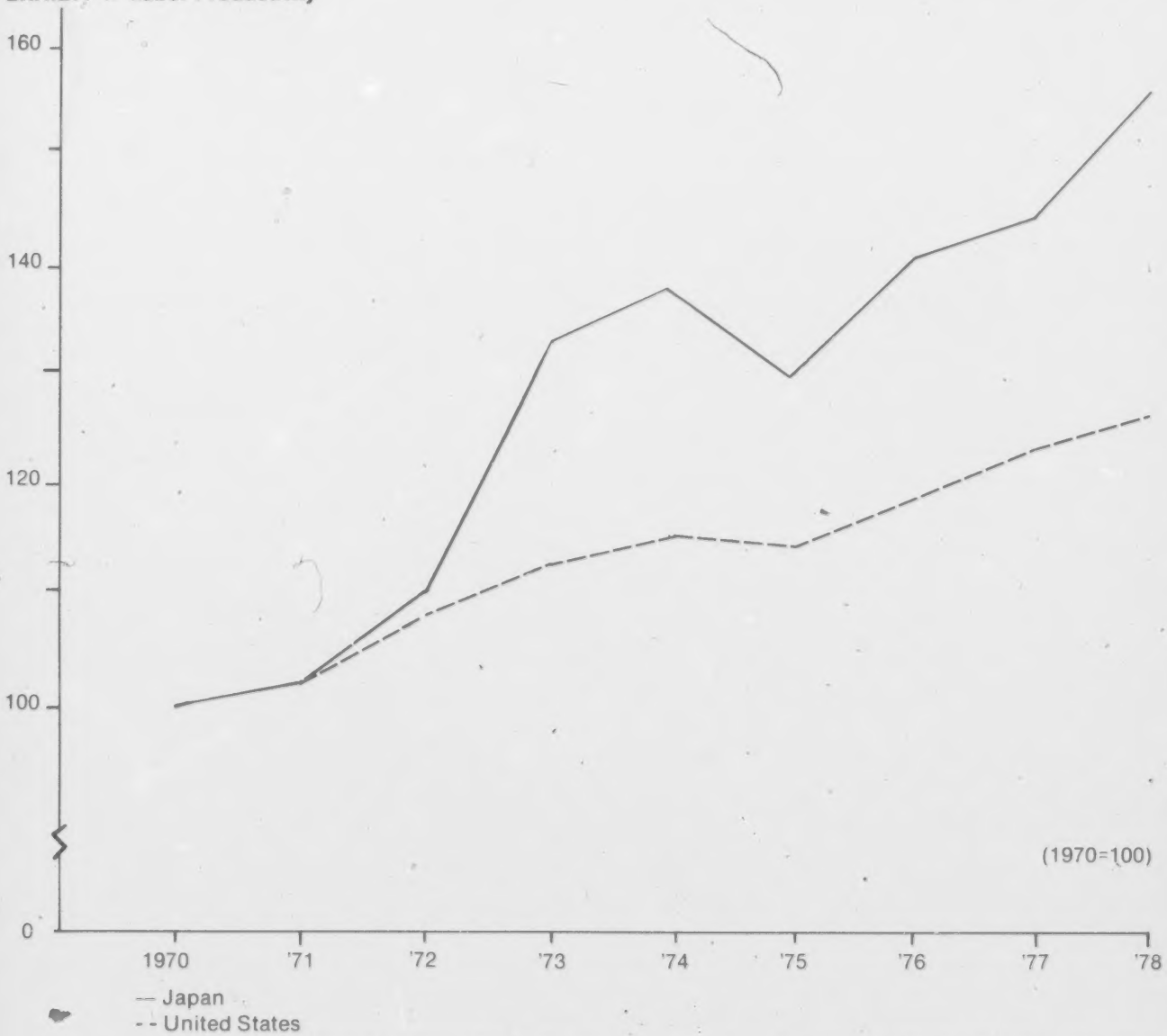
As laudable as this system is argued to be, it is nevertheless primarily implemented in that section of the Japanese economy containing the major industries, and it is generally confined in total application to those select employees singled out for lifetime employment. Although part of the remaining 80 percent of Japan's work force are undoubtedly affected by seniority wage scales, it is doubtful that such systems are implemented as rigorously, and in conjunction with lifetime employment guarantees, as in the select major industries.

The preceding characteristics of the Japanese economy are apparently mores in such major Japanese industries as heavy equipment manufacturing, shipbuilding, automotive manufacturing, and steel production, and they are primarily found in those companies with over 1,000 employees. Due to the magnitude of such industries, it might be appropriate to focus on their economic progress as

an indication of the rise of Japanese productivity since World War II, realizing, of course, that major capital investment in those industries occurred following, and as a result of, the devastation of the war. Such a focus would ignore 80 percent of the work force which, although not part of Japan's primary industrial work force, nevertheless make up a great percentage of the working population and do not totally share in the employment conditions characteristic of those major industries. Is this remaining work force not productive, or are lifetime employment, enterprise unions, and seniority systems merely attributes of a greater employment concept? In order to accommodate industry falling outside of the grand scale and the bulk of the population that makes up the Japanese work force, the answer must lie in the latter consideration.

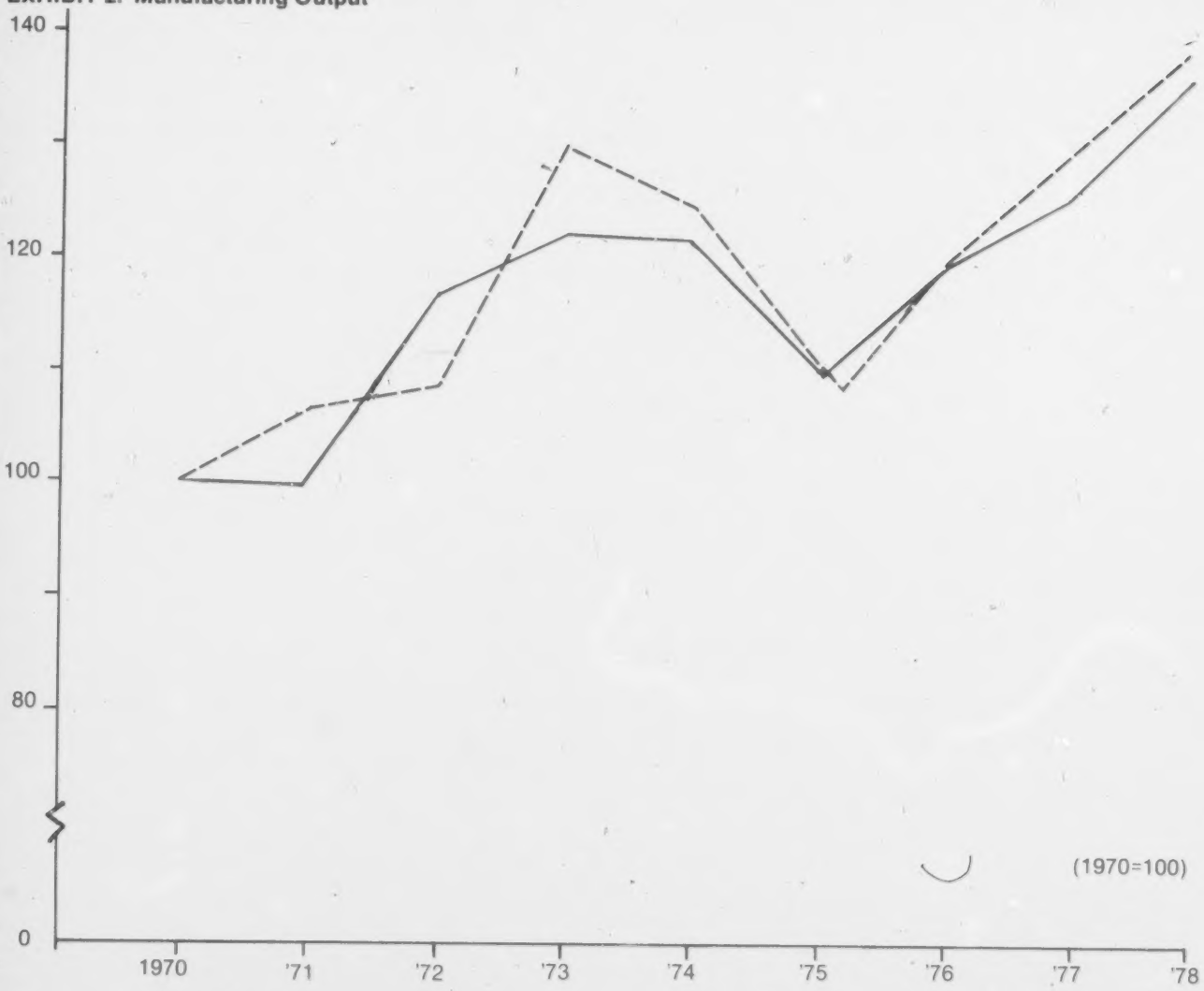
The common goal of all industries visited on the tour was the quality of work life extending beyond the blast furnace or assembly line, including quality of the product, the workmanship, the work place, and the relationship with the employer and customer. The employee's pride in his job, in the product, and in the company, and the corresponding management commitment to the employee were direct results of this feature. Whether the vehicle

EXHIBIT 1: Labor Productivity



Adapted from Japan External Trade Organization, **Productivity and Quality Control** (No. 30, 1981).

EXHIBIT 2: Manufacturing Output



Adapted from Japan External Trade Organization, **Productivity and Quality Control** (No. 30, 1981).

for fostering this attitude was quality control circles or zero defects groups and a management willingness to involve employees in improving the quality of work life through increased communication and input to the production process, or some other form of small group dynamics, the result was a realization among employees that they are an integal part of the entire production process and not merely drones without any influence. At all Japanese industries, white- and blue-collar employees seem actively involved in improving work life and production, in creating a stimulating place to work, in fostering a mutual commitment to each other, and, as a result, in increasing output per unit and income.

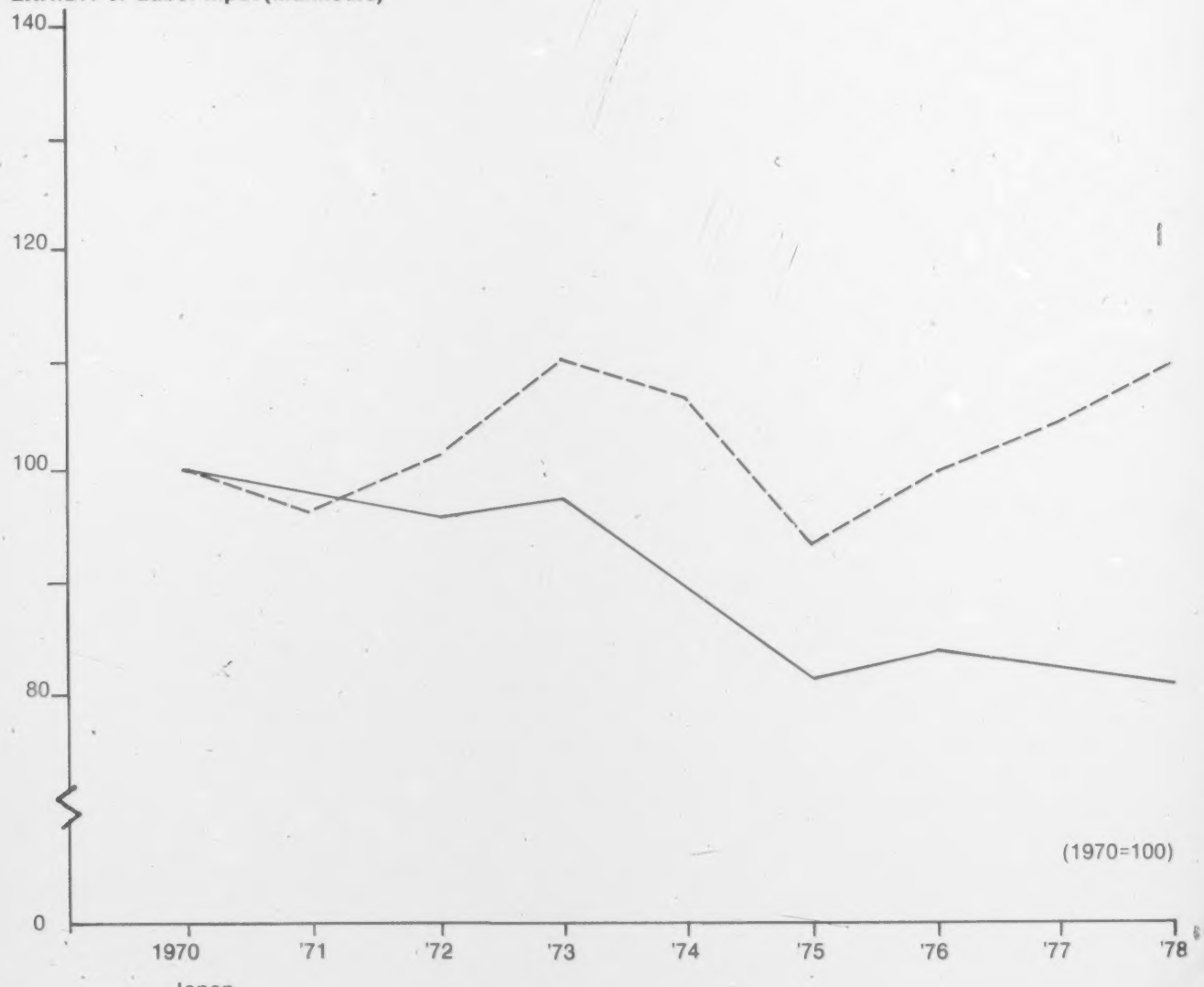
RECOGNIZING DIFFERENCES

In looking toward Japanese business for guidance in improving labor productivity in the United States, it is important that we recognize the fundamental differences and barriers between our nations that would prevent implementation of some business characteristics in our industrial environment. These include much more than the obvious geographic and cultural differences. There are also legal and financial roadblocks to utilizing many of the Japanese programs in America. This is not to say that these are barriers to our being more productive. Rather, they only prohibit our recreating the Japanese system in the United States.

One obvious influence on Japanese business that is absent in the United States is the effect of World War II on recent industrial development. Following the war, Japan was faced with the task of rebuilding its industrial base. With American financial assistance, it did just that. As a consequence, the vast majority of Japanese industry is far younger and employs more modern equipment than its American counterpart. However, this rebuilding should not be viewed as the sole reason for Japanese productivity gains, as some people claim, for while a large initial outlay was necessarily incurred during rebuilding, the corresponding increase in labor productivity has been maintained although rebuilding has been completed.

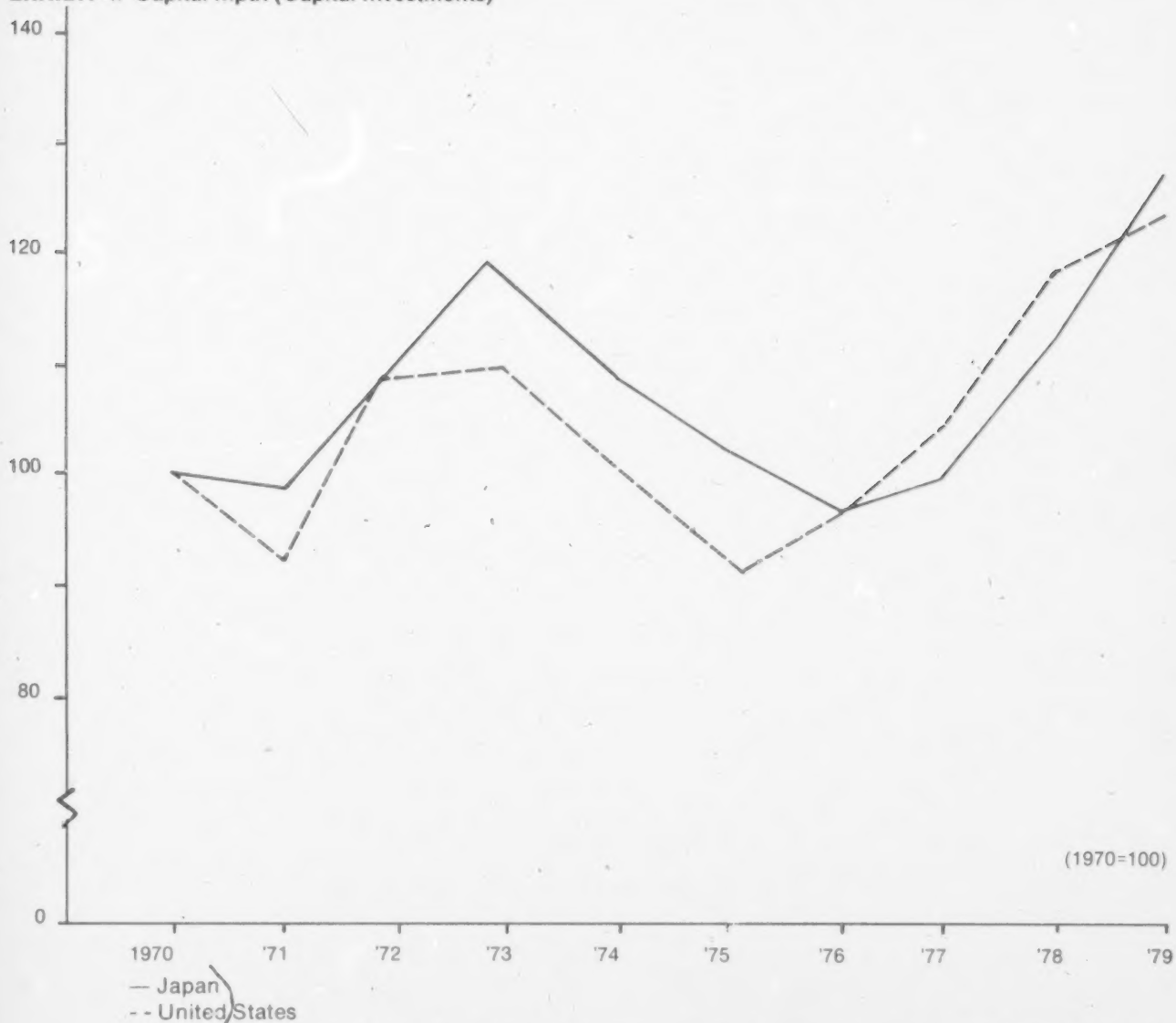
One of the less obvious and yet more significant differences between Japanese and American business is in the financial structure of major corporations. Most Japanese industry is financed through banks or other private financial institutions at a level relatively high in comparison with value of output. American companies, on the other hand, are largely financed through shareholders seeking a relatively short-term return on their investment. The effect of this difference is twofold. First, a private financial institution is in a better position, and probably more inclined, to forego immediate dividends in order to allow for long-term investment and development. Second, the high ratio of capital investment to output in Japan has allowed

EXHIBIT 3: Labor Input (Manhours)



Adapted from Japan External Trade Organization, **Productivity and Quality Control** (No. 30, 1981).

EXHIBIT 4: Capital Input (Capital Investments)



Adapted from Japan External Trade Organization, **Productivity and Quality Control** (No. 30, 1981).

continuous modernization of production facilities and permitted utilization of recent technological advances. Thus privately and institutionally financed Japanese industry appears to have a greater capability than publicly held western corporations to focus on long-term results and commensurate return.

The role of banks and private interests in long-term investment in Japanese industry is one factor in a far larger national commitment to sustained labor productivity and attendant economic growth in Japan, which further distinguishes our systems. Begun in 1955 at the close of the postwar rebuilding period, the Japan Productivity Center has since coordinated and sustained a national drive for economic growth and social progress focusing on increased productivity and involving every sector of Japanese society, including business, labor, government, academia, and consumers. The channeling of these diverse resources into a productivity program with national priorities is perhaps due in part to a coalescence of postwar factors peculiar to Japan. Nevertheless, the result has been rapid and sustained economic growth unmatched by other capitalist economies.

Perhaps the most concrete bar to implementing some of the elements of Japanese business in this country is our body of federal labor laws, including

the National Labor Relations Act and our various antidiscrimination laws. For example, Japanese industry takes great pride in its system of company and enterprise unions. The Japanese explain that their system is one of mutual support, and not adversarial in nature. In short, union and company function together for the common goal of company success. In this country, such a relationship between company and union is illegal. The National Labor Relations Act makes it unlawful for an employer "to dominate or interfere with the formation or administration of any labor organization or contribute financial or other support to it." This provision is meant to safeguard employee rights to choose what union, if any, will represent them. However, the effect of this law is to prohibit the type labor-management relationship of which Japanese business is so proud.

The Japanese system of lifetime employment and many of the Japanese compensation programs would likewise be unlawful under our antidiscrimination laws. As discussed above, lifetime employment only applies to a small group of employees, i.e., recent male graduates. Female and older males are relegated to the ranks of contract and temporary employees. This system could be challenged under our Civil Rights Act of 1964 (Title VII), Equal Pay Act, Age Discrimination in Employment Act, and probably other state and federal laws. The type of preferential employment concepts in Japan runs directly contrary to our concept of equality in employment. The problems inherent in trying to create such a system in this country would be magnified by our multiracial environment and the potential for discrimination on that level as well.

In summary, there are many differences between the Japanese and American business communities that limit the direct transposition of many aspects of Japanese business into this country. The important thought to keep in mind is that we do not need to copy every element of Japanese life to improve our productivity growth. We need only to recognize what underlying approaches to running a business work in their environment that can also work in ours. That is the true purpose to be accomplished in studying the Japanese way of doing business.

COMMON THREADS

To a significant degree, reconstruction of Japan's economy following the war accounts for its initial rapid rate of productivity and economic growth. With the maturation of Japan's economy (generally identified as the 1970's when Japan's level of GNP per capita achieved relative parity with other industrialized nations), however, labor productivity continued its climb. Exhibit 1, indexing rates of labor productivity growth in Japan and the United States 1970-'78, therefore indicates that Japan's productivity growth is no longer solely a function of Japan's postwar haste to rebuild. Exhibit 2, indexing comparative rates of real manufacturing output, similarly fails to account for the disparity in rates of productivity growth. Exhibit 3, showing a decline in Japanese labor input, when viewed with Exhibit 2, reveals that, while increasing production, Japan has decreased units of labor input, thereby increasing the rate of productivity growth. Exhibit 4, showing the relative rates of capital investment to GNP, indicates that, while the Japanese ratio is greater, the investment trends are similar. Therefore a nonquantifiable employee utilization factor must exist which, when taken with the increased efficiency in production Exhibit 3 suggests, accounts for the disparity in labor productivity growth evidenced by Exhibit 1.

Aside from the historically high ratio of private capital investment to output found in Japanese industry and the degree to which the government, financial institutions, and banks are otherwise involved in promoting the nation's economic health, utilization of employees to their full potential in the work place is perhaps the single most important factor in the theory of labor productivity and employee relations in practice in Japan. Similar concepts are readily adaptable in other industrial cultures once the individual industrial characteristics of a targeted business are taken into account. The Japanese model is only an example, albeit a good one, of tailoring a well-known theory of productivity to the social, cultural, governmental, and economic climate of a particular country. Although it would be impossible to superimpose the Japanese model of success, the precepts on which the model is based can be, and have been, implemented elsewhere.

This theory of management is designed to involve employees in the company to a far greater extent than as mere assembly line piece workers. All other things being equal, it is axiomatic that improved quality in a product leads directly to increased productivity. Thus, to enhance the quality of the product through direct employee involvement and input in its manufacture — by way of participative management, small group dynamics, or some other means — is to enhance the productivity of the employee and the company. Increased productivity is, therefore, merely the end result of a theory of management emphasizing

enhanced product quality through active involvement of employees in the manufacturing process. Although the results of such a policy are difficult to quantify, except perhaps in terms of bottom line adjusted growth figures, it is generally accepted that such management techniques account to a substantial extent for the rate of labor productivity growth in Japan in the last several decades. While others point to lifetime employment, company unions, and seniority structured employment as essential components of a successful productivity movement, the better view sees these characteristics as particularly Japanese manifestations of the implementation of an employee-oriented management system and not as essential cornerstones to the establishment of such a system.

It is impossible to create a standard policy framework for heightened quality and increased productivity that will accommodate every business or industry, due to the different characteristics of individual companies. General guidelines and examples must suffice. Innovative management techniques, coupled with and/or creating employee diligence, forms the basic philosophy for an increased quality program. Where applicable, labor union participation will probably be required initially, either through voluntary participation or the establishment of a joint consultation system through collective bargaining. Since Japanese unions are organized on a company basis and generally share the same goals as management, cooperation transcending ideological differences is probably more easily obtained in Japan than in Western economies.

Further, such programs cause legitimate concern for unions, both in previously organized industries and in those firms targeted by unions for representation campaigns. The reason is obvious, for such programs tend to blur any antagonistic labor-management dichotomy at the front line and to involve employees in their work life, creating an identification with the employer company. Without a real or imagined division between employees and employers from which to draw their support, unions can lose their appeal to their constituents and to those otherwise inclined toward unionization. In view of the facts that employees are generally receptive to a participative role in their employment and that, according to a recent poll, over one-half of the American public and more than one-half of the nation's workers believe that labor unions are "mainly responsible" for America's sluggish productivity growth, unions are justifiably concerned over such programs. Faced with this dilemma, the only alternative for unions is to attempt to convince employees that a union setting is the most conducive to these programs. Many unions are resolved to take just such an approach.

Representative programs generally include some form of diffusion of decision making authority among managers and between employees and management. At the core of this program is a commitment to involve employees in the problem solving and decision making process. Since employees have functional knowledge of the manufacturing process, it follows that, as a minimum standard, they are competent to discuss and present ideas to improve the system. Given the opportunity to do so, whether through quality control circles or other small group dynamics or some form of participative involvement, experience shows that they do actively participate in order to improve the production process and thus the quality of the product. Diffusion of this authority further allows greater communication between employees and management and instills an employee commitment to the quality of the product.

As an example, use of small group activities, whether known as quality control circles, self-supervisory groups, or zero defects groups, is widespread in Japanese industry. These groups evolved from the statistical quality control theories of Deming and later expansions of his original parameters. Originally focusing on maintaining quality control, small group activities operating at all levels of a company now encompass most facets of the manufacturing process, including quality control, cost, delivery, morale, safety, and communications. Each of the preceding areas is only one factor having a direct influence on the productivity of the industry since, for example, achieving greater quality control at the price of a dramatic cost increase can easily have a negative, rather than a positive, effect on productivity.

An initial education period for employees and managers in the theory of small group dynamics, statistical quality control, and problem solving is essential. Then, a methodology for recognizing and solving problems can be established which generally includes problem identification, goal and plan setting, analysis, solution development, solution application, results confirmation, solution selection, and results dissemination. With managerial and technical assistance, the individuals and groups assume responsibility for themselves and the company, and take the initiative in problem solving and quality improvement. Although certain Japanese companies present financial or symbolic rewards to groups that have made significant improvements, the actual involvement of the employees in the problem solving and decision

making processes that bring about improvements in the quality of the product of their labor and thus their productivity is the real incentive for full participation in the production process.

The historical, small group association of the Japanese worker and the peculiar characteristics of Japanese employment practices are the reasons this particular system works so well in Japan. While the individualism of the Western worker, the mandates of employment legislation, and the fundamentally different perspective of labor unions in the West would not permit wholesale adoption of such a system in this country, the underlying theory is malleable and has been adopted under various names and in various contexts in the United States.

Ideas American Business Cannot Use

- lifetime employment commitments
- company based unionization
- inflexible seniority structures
- cultural/industrial mores
- method of corporate financing

Ideas American Business Can Use

- statistical and total quality control programs
- employee utilization management theories
- quality control circles and small group dynamics
- national business philosophy and economic priorities

In the two years following the introduction of an employee oriented participative management program at General Motors' Buick Final Assembly Plant in Ann Arbor, Michigan, the quality/productivity rating of the facility soared from the bottom to the top of the GM ratings list. Motorola attributes its worldwide competitive posture (annual sales growth exceeding an average of 20 percent over the past 10 years) to the high quality of its products and the corresponding productivity of its employees who operate under a participative management program. Similar programs are in force with apparent success at Monsanto, Ford, IBM, Georgia-Pacific, B. F. Goodrich, Mead, Honeywell, and other major businesses.

Labor productivity quantified is simply the ratio of outputs to units of input. In the larger sense, however, it is only a function of the factors making up the manufacturing process. A sound program involving employees in problem solving and decision making in the manufacturing process taps their practical knowledge, improves the quality of the product, boosts productivity, and enhances employee relations, with no sacrifice other than the commitment to such a program. Of course, bottom line, increased productivity also depends on factors other than a successful quality control, employee relations program. The Japanese speak of "total quality control" to connote the complete theory, which maintains traditional management functions of corporate strategy, capital investment, and overall cost reduction. But to the extent that management performs its traditional functions soundly, an employee relations program emphasizing quality control involvement can enhance labor productivity and lead to or solidify a stable work force.

CONCLUSION

Japan's rapid productivity growth rate following World War II is perhaps unique in that it resulted from a confluence of factors that included industrial reconstruction from the devastation of war, which led to immediate modernization; a major shift in industrial structure from primary industry to manufacturing; large, long-term capital investment, which allowed continuous implementation of technological breakthroughs; and a cumulative commitment by all sectors of Japanese society to achieve rapid and sustained economic growth. While it is doubtful that the forces initiating the Japanese productivity surge can be borrowed, some of those maintaining the growth rate can be. It must be kept in mind, though, that a quality control circle or participative management program is not a panacea for productivity stagnation in any particular industry. These problems are only methods for enhancing employee productivity and fostering a solid employee relations environment.

Regardless of the name given the individual program or the specific means employed to achieve it, the common goal is to bring about a quality of work life among employees that permeates the work force and illustrates to the participants that the quality of the product of their labor is a reflection of themselves. Experience, in Japan as well as the United States, shows the employees who feel that they have an input into the method and manner in which their skills are utilized, or who are allowed some form of participation in the management process, share with the company a concern for the quality of the product. The quality of the product reflects the extent of their involvement in its production. Naturally, as the quality of the product increases, so, too, will productivity.

The Management Bookshelf

By Dwight Gardner, Business Librarian, M.B.A., M.S.L.S.

The Management Bookshelf is a service to our readers provided by the Elliott White Springs Library of the College of Business Administration of The University of South Carolina.

BIG BUSINESS BLUNDERS
by David Ricks
Dow Jones-Irwin
1818 Ridge Rd.
Homewood, IL 60430
1983, 158 pp., $11.95
This collection by USC International Business Professor Dr. David A. Ricks provides over 200 examples of mistakes committed by corporations during tneir foreign marketing attempts. He notes the typical causes of these errors and draws any applicable conclusions.

THE GENERAL MANAGERS
by John Kotter
Free Press
866 Third Ave.
New York, NY 10022
1982, 221 pp., $15.95
In an in-depth study of the careers of 15 general managers Kotter found that their job duties included a wide variety of complex responsibilities and relationships, which set them apart from other top-level executives. The emphasis here is on the human side of management since the general manager must work through a network of hundreds of individuals from varying levels within the organization to implement his plans effectively.

INDUSTRIAL MARKETING AND SALES MANAGEMENT IN THE COMPUTER AGE
by Robert Kelleher
CBI Publishing
51 Sleeper Street
Boston, MA 02210
1982, 172 pp., $18.95
Here Kelleher recommends ways to improve efficiency and productivity in industrial marketing through the increased use of computer technology in problem solving and decision making. He covers the techniques of obtaining and analyzing industrial marketing data, tells how to set up a customer file that utilizes both internally and externally generated data, and discusses the importance of a marketing productivity analysis.

ESTIMATING MANUFACTURING COSTS
by Lawrence Matthews
McGraw-Hill Book Co.
1221 Ave. of the Americas
New York, NY 10020
1983, 225 pp., $24.95
This book explains the mechanics of estimating how much it will cost to produce a given product or service. It explores basic estimating principles and techniques and how they can be applied to such problems as capital investment projects, product cost estimates, and make or buy decisions. Examples are used to illustrate the application of the various techniques.

PERFORMANCE APPRAISAL: A MANAGER'S GUIDE
by Patrick Fleenor and Peter Scontrino
Kendall/Hunt Publishing Co.
2460 Kerper Blvd.
Dubuque, IA 52001
1982, 216 pp., $10.77 Paper
This practical approach to performance appraisal presents a framework for applying an appraisal system to any organization. It covers the techniques for developing performance standards, the mechanics of the formal review session, and the need for protecting the employee's rights throughout the process. Extensive supporting materials are included in the appendices: a bibliography for further reading, a glossary of terms, a sample manual, and various forms.

IN SEARCH OF EXCELLENCE: LESSONS FROM AMERICA'S BEST RUN COMPANIES
by Thomas Peters and Robert Waterman, Jr.
Harper and Row Publishers
10 E. 53rd St.
New York, NY 10022
1982, 190 pp., $19.95
Here the authors examine the corporate behavior of over 40 well run American firms, including McDonald's, Delta Airlines, and Proctor and Gamble. From their analysis of the factors that make these firms successful, the authors have distilled, and illustrated, 8 central lessons of business behavior.

* * *

Readers are invited to submit titles of books that they wish to call to the attention of others.

STATISTICAL INDICATORS OF SOUTH CAROLINA BUSINESS

ITEMS	October 1982	October 1981	Latest Month Percentage Change From Year Ago
Total Bank Deposits ($ millions)	$ 7,100.1	$ 6,235.7	+ 13.9
Demand	3,096.4	2,871.8	+ 7.8
Time	4,003.7	3,363.9	+ 19.0
Total Bank Loans ($ millions)[a]	N.A.	N.A.	—
Savings in Savings and Loan Associations ($ millions)	$ 6,005.8	$ 5,725.9	+ 4.9
Sales and Use Tax Collections ($ thousands)	$65,218.0	$63,831.4	+ 2.2
Labor Market:			
Civilian Labor Force (thousands)	1,479.7	1,424.5	+ 3.9
Employment	*1,320.4*	*1,307.2*	*+ 1.0*
Rate of Unemployment (percentage)	10.8%	8.2%	+ 31.7
Nonfarm Wage and Salary Employment (in thousands)	1,180.1	1,201.0	- 1.7
Manufacturing	356.5	386.7	- 7.8
Contract Construction	65.6	71.1	- 7.7
Transportation and Public Utilities	54.3	53.9	+ 0.7
Wholesale and Retail Trade	237.5	232.5	+ 2.2
Finance, Insurance, and Real Estate	52.1	50.2	+ 3.8
Services, Mining, and Miscellaneous	176.5	169.9	+ 3.9
Government	237.6	236.7	+ 0.4
Average Hourly Earnings, All Manufacturing (in dollars)	$ 6.71	$ 6.37	+ 5.3
Initial Unemployment Claims Filed in South Carolina	58,484	36,896	+ 58.5
Placements by South Carolina Employment Offices (nonagricultural)	[b]	5,053	—
Indexes of Prices Received by Farmers (1977=100)			
All Farm Products	123	120	+ 2.5
All Crops	149	146	+ 2.1
Livestock and Products	89	86	+ 3.5
S.C. Parity Ratio	79	80	- 1.3
New Motor Vehicle Registrations			
Cars	7,170	7,511	- 4.5
Trucks	2,083	1,928	+ 8.0

	October 1982	October 1981	First 10 Months 1982	First 10 Months 1981	First 10 Months Percentage Change
Valuation of Building Permits Issued ($ millions)					
Total for all S.C. Counties	$150.3	$161.3	$1,579.4	$1,432.8	+ 10.2
Available County Data					
Aiken	3.2	3.7	27.7	29.6	- 6.4
Berkeley	4.5	1.5	34.1	27.8	+ 22.7
Charleston	22.5	31.2	197.2	212.5	- 7.2
Dorchester	4.6	5.0	29.6	25.8	+ 14.7
Lexington	4.8	2.8	62.5	45.3	+ 38.0
Richland	11.4	9.8	176.7	118.4	+ 49.2
Greenville	21.9	20.9	170.4	144.0	+ 18.3
Pickens	1.8	5.7	15.3	29.2	- 47.6
Spartanburg	4.8	12.3	61.5	107.2	- 42.6

[a]Due to the termination of certain data series by the Federal Reserve Bank of Richmond, this series is no longer available.

[b]Due to Federal Package Program change in ESARS Program, this series is no longer available.

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DIVISION OF RESEARCH ■ COLLEGE OF BUSINESS ADMINISTRATION ■ THE UNIVERSITY OF SOUTH CAROLINA

Information Management: Part I

Volume XXIX, Number 5
June 1983

"Information Management, Technology, and Policy: An Introduction"
by Sena Hoosenally Black

"Strategies and Tools in Transition"
by Donald A. Marchand

"Strategic Planning: An Overview"
by Sena Hoosenally Black

"The Employer and Employment Laws"
by James J. Baldwin

"Safeguarding Your Data Center"
by Sara Schechter-Schoeman

"Getting Started With Office Automation"
by William J. Kettinger

"The Management Bookshelf"
by Dwight Gardner

Statistical Indicators of South Carolina Business

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Summary of Contents

3 **Information Management, Technology, and Policy: An Introduction.** In this brief introductory article, Sena Hoosenally Black, an Information Resources Specialist for the Institute of Information Management, Technology and Policy in The University of South Carolina's College of Business Administration, looks at the emergence of the Information Age and discusses the various facets of information management covered by the authors contributing to **Information Management: Part I** and **Part II** (this month and next).

4 In **Strategies and Tools in Transition,** Dr. Donald A. Marchand, Director of the Institute of Information Management, Technology and Policy, "provides a map of the transitions information management has gone through in the last 40 years and clarifies both its present status and its expected future."

8 **Strategic Planning: An Overview.** Here, Sena Hoosenally Black "briefly traces information technology planning through three stages of development and discusses the key factors for its successful execution."

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16 In **Safeguarding Your Data Center,** Sara Schechter-Schoeman, an Information Resources Specialist for the Institute of Information Management, Technology and Policy, challenges managers in business and government to "institute a broad-based contingency planning process for computer center disasters." Then, she tells them how.

21 **Getting Started With Office Automation.** In this article, William J. Kettinger, Associate Director of the Institute of Information Management, Technology and Policy, looks "at the equipment that makes up office automation" and offers a "guide managers might consider when introducing office automation."

27 **The Management Bookshelf,** a regular feature in which Dwight Gardner, USC BA's Business Librarian, reviews books of interest to business practitioners.

28 **Statistical Indicators of South Carolina Business.** A regular feature, listing the latest available data.

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This month's cover. Logo for the Institute of Information Management, Technology and Policy in the College of Business Administration at The University of South Carolina. Representative members of its staff bring you a look at what their world can do for your world — in the pages following.

Information Management, Technology, and Policy: An Introduction

By Sena Hoosenally Black

The Institute of Information Management, Technology and Policy is particularly pleased to have this opportunity to dedicate a series of articles to the management of information technology in business and government. With the emergence of the Information Age, computer and communications technologies have become an integral part of most governments and companies, large and small. Consequently, information is rapidly being recognized as an organizational asset that must be carefully planned and managed if the productivity potential of these technologies is to be realized.

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In this, and next month's, issue of the **Business and Economic Review,** some of the major challenges posed by the increasing use of information and communication technologies in our society will be highlighted. Together, these articles will reflect two broad perspectives for understanding the use and management of information technology in government and business: concepts and applications. The current issue of the **Review** includes four articles that delineate key management and technology considerations central to any business or government as it adjusts to the Information Age. In "Strategies and Tools in Transition," Dr. Donald A. Marchand, Director of the Institute of Information Management, Technology and Policy, explains the significance of managing information and traces its evolution from the era when information management was equated to paper work and forms control to a current focus on managing information as a strategic organizational asset. Within this framework, a cornerstone of the information management function is strategic planning for information systems, and this author presents an analysis of that function in "Strategic Planning: An Overview." Here she briefly explores the evolution of the information systems planning function, and outlines the characteristics essential for its success. Sara Schechter-Schoeman explores yet another critical information management function, contingency planning, in her article "Safeguarding Your

EDITOR'S NOTE: This issue of the Business and Economic Review is dedicated to the Institute of Information Management, Technology and Policy, College of Business Administration, The University of South Carolina. We are especially grateful to Mrs. Sena Hoosenally Black, an Information Resources Specialist for the institute, for coordinating this venture. The institute was created to serve as a resource center for research and service activities that will improve the management of information resources and increase productivity. Its programs include investigative studies and publications, consultative services that respond directly to specialized needs and concerns, briefing and training seminars for continuing education needs, and clearinghouse and referral services based on a specialized library of national and international resources. Anyone wishing additional information on the Institute of Information Management, Technology and Policy, or particular issues related to the management and use of information technology, is invited to fill out and return the self-addressed post card included in this issue of the Business and Economic Review.

Data Center." In large organizations, this concern with security is especially relevant, and will become increasingly so as our dependence on technology becomes ubiquitous. Finally, of the many technologies integral to the Information Age, none is more promising than that of office automation. In "Getting Started in Office Automation," William Kettinger describes the major office automation technologies, from word processors to telecommunications, and suggests guidelines for implementation.

In next month's issue, the **Business and Economic Review** will continue its look at information management and technology by presenting four articles by senior managers on the specialized applications of information technology in diverse sectors of the South Carolina economy: state government, education, manufacturing, and banking. While these topics by no means exhaust the many uses of information technologies or the scope of the issue involved, they do illustrate key trends in the management and use of information technology that will become increasingly significant in the near future. They concern matters that business and government will find difficult to ignore in the decade of the '80's, but they also represent major opportunities for the future, opportunities that must be anticipated and propitiously captured.

Strategies and Tools in Transition

By Donald A. Marchand

A great deal of confusion exists today over the appropriate role and scope of the information management function in business organizations. For many years it was equated with paper work or records management, a necessary evil to be conducted in the background of organizational life. During the past 20 years, however, it has been significantly influenced and shaped by innovations in computer and communications technologies, and its historical evolution has been dramatically different from that of personnel or financial management.

The rapidly changing products and services of the information and communications industries have served as major external stimuli in rethinking and adapting concepts and policies for information management to each new "generation" of technologies. Unlike the evolution of the personnel and financial management functions where no comparable technological forces have prompted radical rethinking of basic underlying concepts and policies, both the tools and strategies of information management have been in constant transition.

It is no wonder, then, that many managers are unsettled regarding the current status and future direction of information management. It is the purpose of this article to provide a map of the transitions this function has gone through in the last 40 years and to clarify both its present status and its expected future. Altogether, 4 evolutionary stages are presented, with particular attention placed, in each step, on explaining the precipitating forces, management strategies, organizational location, and technological influences that have shaped, or will shape, the information management function.

STAGE 1: PHYSICAL CONTROL OF INFORMATION

The first stage in the development of the information management function began in the late 1800's and lasted until the late 1950's. During this period, the typical American company moved from being a geographically localized entity with one or a few product lines in which the span of control was small and communications between levels of management simple to an organization with diverse product lines and geographically dispersed offices and production plants in which the span of control widened and communications became slower and more complex. Moreover, after the Great Depression, government, at both the federal and state levels, experienced tremendous growth, increasing its size and adding to its regulatory powers over business.

These trends led to a significant expansion in the volume of paper work generated and maintained. With space costs continually rising and those of paper work processing (equipment, supplies, and personnel) soaring, it became clear that the cost of creating and maintaining correspondence,

reports, and records would be a major expenditure of every business (and government agency). Therefore, controls had to be put in place, in much the same way they had been placed over manufacturing functions, with the basic aim of increasing efficiency and controlling volume.

A variety of techniques were instituted, such as records/report programs, mail management, directives management, and correspondence management, to guide the process by which paper in its many forms was handled and processed. In addition, a great deal of attention was placed on office design to increase the efficiency of communications between organizational units and to decrease the time required to move stacks of records and reports from one office to another for processing and review.

As these management techniques developed, organizational responsibilities were created and personnel assigned. These employees tended to be at the supervisory or lower middle management levels. In small companies, office managers, administrative assistants, and executive secretaries assumed these responsibilities, but larger firms created specialized positions for correspondence/reports managers, mailroom supervisors, and records managers.

Assignment to these supervisory positions did not, in most cases, lead to senior management level promotions. By and large, a young person desiring to be a senior vice-president or chief executive officer did not seek opportunities for advancement in the information management support function. Furthermore, coordination within the paper work management functions tended to be fragmented: no particular managerial logic dictated where these responsibilities were assigned.

In this stage of evolution, the information management function was a lower level, support-oriented activity that went on in the background of organizational life. The costs of paper work management, therefore, were not directly identified, but considered to be part of the overhead expense of doing business. As a support service, it was removed from business planning activities.

STAGE 2: MANAGEMENT OF AUTOMATED TECHNOLOGY

The second stage in the development of the information management function occurred in the 1960's and 1970's and was characterized by the separate evolution and application of electronic data processing, telecommunications, and office automation technologies. Its primary strategic objective was enhanced technical efficiency and physical control of new technologies and resources. 1960's second and third generation computers provided new opportunities for automating routine, repetitive applications. The main focus of EDP was on internal, transaction-based information which formed the basis for the development of Management Information Systems (MIS) in the 1970's. Moreover, during the 1960's and 1970's, advances in word processing technology and electronic duplicating machines provided the basis for restructuring paper work and text processing. Finally, enhancements in voice communications equipment and the emergence of data communications that linked computers and users in remote locations provided additional opportunities for the evolution of telecommunications.

As businesses began incorporating more and more technologies, centralized data processing departments were created to tend to the new computers. Telecommunications coordinators and managers focused on the voice communications needs of the firm, and word processing and duplication centers developed to maximize the economies of scale derived from supporting the duplicating and text-processing needs of multiple units in the organization.

Despite these organizational innovations, though, management control usually was determined by

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whichever individual manager or group acquired the technology first. In many cases, the dominant mode was to acquire a new computer and then figure out how and who to use it. Moreover, technical personnel overseeing the use of new technologies rarely, if ever, relied on the policies and practices developed by those who managed manual, paper work-oriented functions. Automated management of information was perceived as both different from, and ultimately supplanting, manual management. Moreover, unlike the paper work management stage where users had direct control over the media and tools of information processing, technical personnel in the second stage acted as intermediaries between the needs of users and the ways these needs were defined and interpreted in applying new technologies. Thus it is not surprising that during this period significant communication gaps appeared between the users of information and the suppliers of information technology.

"A great deal of confusion exists today over the appropriate role and scope of the information management function in business organizations."

Stage 2 saw the organizational status of the new technical management activities confined to middle-management levels in most businesses, with one exception. The EDP function moved from being a middle-management to a more senior management concern as data processing management became MIS management. Increasingly, large businesses appointed vice-presidents for information services or MIS as expenditures and the size of the EDP departments continued to grow. In contrast, the managers of telecommunications, word processing, and duplication units were confined to largely middle-management or office management positions. Thus, during this second stage of evolution, the information management function continued to be fragmented and organizationally uncoordinated.

STAGE 3: INFORMATION RESOURCES MANAGEMENT

The third and current stage has been precipitated by the increased convergence, both technical and functional, of data processing, office automation, and communications technologies. In contrast to the second stage, the 1970's and early 1980's have been characterized by the emergence of technical tools and concepts that increasingly break down the distinctions between data and word processing, voice and data communications, and centralized and personal use of computing resources. Distributed data processing that uses mini and micro computers, local area and long-distance networks that integrate voice and data communications, multifunction work stations that incorporate electronic messaging and document production as well as electronic time management, and, finally, personal computers, have served to redefine the use of information technology; to narrow previous gaps between users and suppliers; and to change the relationship between those who manage manual, and those who manage automated, information systems.

Consequently, four significant and related changes have taken place. First, many business (and government) organizations have replaced the vertical management control over data processing, office automation, and communications technologies with integrated organizational managements for strategic planning and operations. Second, as organizations have become more dependent on internal use of information technology, more attention has been placed on incorporating information technology planning into the strategic business plans of the firm. Third, the requirements to design multifunctional office automation networks have necessitated more interdisciplinary use of data processing, communications, office management, and paper work management personnel. Fourth, increased investments in information technology by many businesses have required more involvement of top management personnel.

". . . the 1970's and early 1980's have been characterized by the emergence of technical tools and concepts that increasingly break down the distinctions between data and word processing, voice and data communications, and centralized and personal use of computing resources."

With these changes, the strategic objectives of the information management function have shifted away from an exclusive focus on physical control of paper work or technologies toward acting as a key resource that can be managed like such other strategic resources as personnel, materials, or capital investments. This shift has implied applying

resource management techniques (such as planning, costing, budgeting, and evaluating) to information resources and moving management responsibilities to more senior levels.

The ultimate outcome of these trends has been to recognize more explicitly the significance of treating this area as a resource management function at the same level of importance as marketing and financial and personnel management. In addition, it has also involved a movement to integrate concerns over the effective management of information resources and technology within the strategic business planning function of the organization. These changes have been incorporated under the umbrella of the Information Resources Management concept. At the center of this concept is the concern that some order must be established within the previously uncoordinated, and at times, chaotic use of new technologies.

STAGE 4: KNOWLEDGE MANAGEMENT

Although businesses today are making the transition from Stage 2 to Stage 3, the outlines of a fourth stage are already beginning to emerge. While most organizations will not be making a transition to this stage until the 1990's, it is important for them to be aware of emerging trends.

Probably the most significant factor that will change the way American business thinks about information management will be American business itself. Over the next five years, United States business will spend over $1 trillion on information processing and new products and systems. Increased dependence on, and penetration of, information technologies into every level of operational and managerial decision making will precipitate a further integration of concerns with physical/technical management and management of information processes for improving organizational decision-making, planning, management, and operations. In contrast to Stages 2 and 3, the fourth stage will focus primarily on the **content** of information itself and how it is used and valued.

This shift from **physical content management** will be enhanced by new products designed to incorporate decision support facilities and knowledge-based systems software into increasingly significant work stations and networks. The first wave of such products are already entering the marketplace in the form of electronic spread sheets, executive planning tools, and information locator systems aimed at facilitating both structured and unstructured problem-solving and enhancing integration of external and internal information sources. The second wave during the mid- to late 1980's will be designed to incorporate software systems concepts based on artificial intelligence research, and provide users "expert" systems for problem diagnosis, file searching, and analysis.

These trends will redefine the concept of "office automation" to "office intelligence." Therefore, the primary objective of the fourth stage will be to enhance the way executives, professionals, and administrative support staff actually develop and use information in analytical activities. The focus will be on **knowledge management,** so firms will need to incorporate both information technology planning and information use planning. In addition, while the information management support function will continue to play an integral role in planning and allocating new technologies and overseeing corporate data services, it will become increasingly important that every member of the business organization from the CEO on down learn the value and role of managing information as a resource in his or her individual function.

"The strategic objectives of the information management function have shifted away from an exclusive focus on physical control of paper work or technologies toward acting as a key resource that can be managed like other strategic resources . . ."

Organizational and information productivity will become integrally linked. Increasingly, managers will define the former on the basis of how well they guide their firm in the acquisition and use of knowledge. How knowledge is applied to products and markets will determine the long-term expansion or contraction of the production work force and will, therefore, define the basis for economic growth and profitability. Recognition of dependence on effective utilization of knowledge will become an essential management attribute and influence the basic operating philosophy of senior officers.

CONCLUSIONS

For many executives today, understanding the evolution of the information management function can be compared to walking through a cluttered landscape. It is difficult to perceive clear guideposts when new technologies are constantly being

offered. In many instances, there is the temptation to put the cart before the horse, to invest in new tools and techniques **before** considering **what** contributions information management can make to corporate growth and profitability. The outcome, therefore, is often inappropriate technologies, wasted expenditures, and lost opportunities.

"Over the next five years, United States businesses will spend over $1 trillion on information processing and new products and systems."

To reverse this trend, executives will need to identify their position in the evolutionary path of information management and realize that this function is an integral part of business strategy. Failure to do so will increasingly threaten corporate productivity and opportunities for growth.

Suggested Readings:

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Strategic Planning: An Overview

By Sena Hoosenally Black*

Business planning has long been accepted as a basic principle of good management. Variously termed strategic business planning or strategic management, business plans are essential to the formulation of competitive strategies. Strategic planning for information technology, on the other hand, is less well understood. In part, this is because of the relative recency of the use of information technology on an extensive scale in most companies. Beyond this factor, however, the more important reason has been the unfortunate attitude that information technology is more of a technical concern than a managerial one. In recent years, this attitude has been undergoing a dramatic change. Increasingly, information technology is being accepted as a resource that must be managed like any other resource, such as land or capital. Indeed, in many cases, information technology is so vital to the operations of a business that it has become a key resource to be leveraged successfully for higher productivity and profits. Accordingly, strategic planning for information technology has emerged as a critical management technique.

*For a photo and biographical sketch of the author, see p. 3.

To understand this concept better, we will briefly trace information technology planning through three stages of development. Then we will discuss the key factors for its successful execution.

DATA PROCESSING PLANNING: LATE 1960's-'70's

The first stage of development occurred in the late 1960's and early 1970's in large data processing departments. Planning was limited to management control over EDP resources within the operational department. Since the focus was on large data processing systems, planning did not include the area of telecommunications. Moreover, it became an internal management tool of the data processing department, and not of the organization as a whole. Consequently, it was intended to be primarily a management tool to control the expansion of data processing departments and to ensure the efficient interfacing of diverse technical systems. It also served to enhance the quality of service provided by the data processing department by enabling it to anticipate and plan for user needs.

STRATEGIC PLANNING: LATE 1970's

In the late 1970's, with the increasing use of information technology and the realization that it could increase productivity, the concept of information technology planning expanded to include two notions inherent in the term "strategic." For the first time, it was commonly accepted that the American economy was predominantly an "information society" in which information technology was a key leverage point for increasing productivity. Thus, information technology rapidly came to be perceived as a "strategic resource." As such, it was important not only to control costs and ensure the compatibility of expanding systems, but also to anticipate future innovations for maximizing productivity gains. In other words, information technology was now associated with "opportunity costs" if a company failed to plan for emerging needs and alternative technical solutions.

This trend was followed by a logical development in the concept of planning. Information technology planning must not only serve the management needs of the data processing department, but the company as a whole. In other words, information technology plans must be related to business plans, not only in a supporting capacity, but also as an equal partner, helping to define and even create business needs and plans. Hence, information technology planning came to be perceived as "strategic" to the interests of the company, a development of critical importance.

STRATEGIC PLANNING FOR AN INTEGRATED INFORMATION ENVIRONMENT: EARLY 1980's

The latest stage in the concept of information technology planning is primarily a function of the technological marketplace. As the computer and communications technologies begin to merge, planning for alternative technological solutions is becoming a reality. Consequently, as information technologies progressively become more integrated, the concept of strategic planning must include not only data processing resources, but also telecommunications and office systems technologies as well. It is clear that the environment of the 1980's will be an integrated one. Therefore, it is equally clear that strategic planning for information technology must be formulated within the context of an integrated information environment by comprehensively including all information technology resources within the planning framework.

KEY FACTORS FOR SUCCESS

Because strategic planning for information technology is a relatively new development, and because planning must be tailored to each company's needs, there is no single methodology universally accepted as "the planning formula." On the contrary, formulating a planning function can be a difficult and complex process, with mixed results. A sufficient number of large corporations have succeeded, however, to make it possible to appreciate both the tangible benefits and some of the key components. The latter are presented in the sections following.

THE NEED FOR AN INTEGRATED MANAGEMENT STRUCTURE

A major consideration for the successful formulation and implementation of strategic planning for information technology is the existence of an organizational framework with two major characteristics: a strong management orientation and a responsibility that encompasses the integrated range of information technology. The first characteristic is essential if information technology is to be managed as a strategic resource to help achieve business goals. The second is imperative if planning is to anticipate the technological environment of the 1980's which continues to merge the data processing, communications, and office systems technologies. For both of these concerns, the creation of the position of the "Information Resources Manager" or "Chief Information Officer" is especially relevant.

The Need to Relate the Information Technology Plan to the Business Plan

A prime motivation for implementing a strategic planning function for information technology is not only to manage this resource to best advantage in a volatile environment, but also to manage it to achieve corporate goals. The linkage between information technology planning and business planning, therefore, is a critical factor. To achieve this, the information technology manager must be able to translate the corporate mission into concrete and realistic information technology goals, and the planning function must not only translate business goals into information technology goals but also participate actively in defining business goals. In other words, the tighter the coupling between the information technology planning process and the business planning process, the more successful the implementation of the strategic planning technique in the corporation. The information manager, therefore, must be cognizant of diverse ways to accomplish this task.

The Need to Understand the Different Levels of Planning

The specifics of an information technology plan are dependent primarily on three definitions or levels of planning and control in the organization. The first level, that of strategic planning, focuses on the use of information technology to achieve and define the business goals of the organization. At this level, planning is long term in nature, generally spanning a minimum of three years. Here, the emphasis is on understanding current and future environmental factors in the technological marketplace, business environment, and governmental policies so overall strategy and priorities can be established.

A second level of planning is that of management control, which focuses on functional activities such as resource allocation and evaluation. Here, the planning horizon is considerably shorter, typically of a year's duration.

The final planning level is the operational level, which focuses on technical and operational considerations such as systems configurations necessary for the implementation of the strategic plan. As in the case of most operational plans, planning is often monitored on a quarterly or month to month basis, with attention to the accomplishment of specific tasks.

Distinguishing among these three levels of information technology planning with their differing functions is critical to successful formulation and implementation. The levels should not be carelessly substituted for each other. For strategic planning to be successful, it is important that operational planning not be considered as the sum and entirety of the "information technology plan." Of the three levels, the formulation of strategic direction is a primary requisite to guide managerial and operational planning.

The Need to Define an Appropriate Planning Methodology

For strategic planning to be successful, it is important that the methodology for creating and executing a plan be adapted to the business environment and management style of the company. While all firms, large and small, can benefit from strategic planning for information technology, the methodology used to generate the plan will naturally differ. For example, one would not expect a large, diversified, multinational corporation to adopt the same procedures as a smaller, single industry company. The degree of control and centralization in formulating and implementing the plan will vary widely in different environments.

In single industry companies with a philosophy of strong management control, the information technology planning process can successfully be a centralized function that includes the entire range of strategic, management, and operational planning. Such a methodology can be characterized as "top-down" planning. On the other hand, in large, diversified companies with greater local autonomy, the most successful planning methodology will be one that centers on coordination, not necessarily control. In this environment, planning must focus on the strategic level, with a delegation of management and operational planning to the decentralized units. This methodology is best described as "bottom-up" planning. Between these two extremes it is possible to identify a third prototype applicable to relatively diversified companies with centralized management control: planning as an oversight function. This methodology, best described as "bottom-up planning with top-down directives," typically will focus on the strategic and management levels of planning, and delegate operational planning to local units. Understanding these alternative planning methodologies is important if companies are to avoid the error of adopting the wrong methodology for their particular circumstances.

CONCLUSIONS

In an economy that is progressively information intensive, strategic planning for information technology is becoming increasingly important. It is fundamentally a management technique with enormous potential. But, like all management techniques, it is essential that the tool be understood clearly and that the pitfalls of misapplying the method be avoided. Properly implemented, strategic planning for information technology can mean the difference between realizing productivity gains and increasing market share, or losing the competitive edge.

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F. Warren McFarlan, "Problems in Planning the Information System," **Harvard Business Review** (March/April 1971): 75-89.

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The Employer and Employment Laws

By James J. Baldwin, LL.D.

The Employer and Employment Laws is a regular feature. Suggestions and inquiries by readers are invited.

AVOIDING DISCRIMINATION AGAINST THE HANDICAPPED IN THE EMPLOYMENT SETTING

Discrimination against the handicapped is a relatively recent development in employment discrimination law. The federal statute addressing handicap discrimination, the Rehabilitation Act,[1] was enacted in 1973, with several amendments added in 1978. Moreover, six states, including South Carolina, still have no state statute prohibiting handicap discrimination.[2] However, situations do arise under these statutes that need to be adequately addressed and properly handled by employers since adverse employment action taken against a handicapped employee or applicant can have severe consequences for employers, including back pay liability and an order to hire or reinstate an individual if he or she fits the definition of "handicapped." While these laws against handicap discrimination are similar in many ways to laws against discrimination on the basis of race, sex, religion, and national origin, there are some significant differences. This article will outline some of the prohibitions set out in both federal and state handicap statutes and offer a number of general guidelines that will help companies understand the basics of handicap discrimination law.

Section 503[3] and 504[4] of the Rehabilitation Act have the greatest impact on employers. Section 503 mandates that any federal contract in excess of $2,500 contain a provision requiring the employer-contractor to take affirmative action to employ and advance in employment **qualified** handicapped individuals. This requires not only positive recruitment and outreach activities to identify and employ handicapped individuals, but also the duty to review policies and records to identify promotable and transferable handicapped employees.[5] Section 503 also requires employers with 50 or more employees, and federal contracts in excess of $50,000, to prepare and maintain an affirmative action program,[6] which can be integrated with, or entirely separate from, any other required affirmative action program.

The Office of Federal Contract Compliance Programs (OFCCP), the federal agency responsible for investigating complaints of handicap discrimination by federal contractors under Section 503, has determined that there are three key issues under Section 503:

1. whether the complainant is qualified to perform the job in question,
2. whether the complainant would be qualified to perform the job if he or she were reasonably accommodated by the federal contractor, and
3. whether the complainant was in fact reasonably accommodated by the contractor.

These issues point out the necessity of having a clear understanding of the requirements of a particular job. If the requirements are precise, it is easier for an employer to determine whether a

[1] 29 U.S.C. § 701, **et seq.**

[2] Those states are Arizona, Delaware, Louisiana, North Dakota, South Carolina, and Wyoming.

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[3] 29 U.S.C. § 793.

[4] 29 U.S.C. § 794.

[5] 41 C.F.R. § 60-741.5(e).

[6] 41 C.F.R. § 60-741.4.

particular applicant or employee can handle the job in question. Moreover, when the job requirements are specific and understandable, it is easier for the employer to determine when and if "reasonable accommodation," a concept that will be more fully discussed below, is practical.

Section 504 prohibits the exclusion of any person because of his or her handicap from participation in, or from receiving the benefits of, a program receiving federal financial assistance. Thus, if federal financial assistance is granted to an employer through an arrangement such as the Comprehensive Employment Training Act (CETA), qualified handicapped individuals cannot be denied or discharged from employment related to that program solely because of their handicap.[7] There is currently some debate as to whether an employee is covered under Section 504 if the federal financial assistance is unrelated to employment. Prior cases held that the primary objective of the federal financial assistance must be related to employment.[8] The United States Court of Appeals for the Third Circuit, however, recently held in **Le Strange v. Consolidated Rail Corp.**[9] that a handicapped job applicant or employee is covered under Section 504 even if the primary objective of the employer's federal financial assistance is unrelated to employment, as long as the employee's position grows out of, or is incidental to, that program. Due to this split in authorities, the Supreme Court has agreed to review and resolve the issue.[10]

The point that has led to the greatest volume of litigation under the Rehabilitation Act and corresponding state handicap discrimination statutes is the definition of "handicapped." The regulations promulgated under the Rehabilitation Act render some guidance, but are by no means conclusive. They define a handicapped person as one who has a mental or physical impairment that substantially limits one or more of that person's major life activities, including employment. In addition, a person is considered handicapped if he has a record of a mental or physical impairment, or is regarded as having such an impairment.[11] State courts have generally accepted and applied this definition when interpreting their own state statutes.

In applying this definition, the courts have included a wide variety of impairments and ailments within the term "handicapped." As already noted, one court has held that sensitivity to tobacco smoke is a handicap since it affects the employee's ability to work when smoke is present.[12] In addition, the courts have included such ailments as diabetes mellitus,[13] narcolepsy,[14] epilepsy,[15] and asthma[16] within the definition of handicapped. In each case, the court found that the ailment tended to limit the employee's ability to obtain and/or retain employment, a major life activity. The courts have likewise held that physical conditions such as chronic back problems[17] and utilization of a prosthesis after leg amputation[18] also qualify a person as handicapped since they affect the person's ability to obtain and/or retain employment.

The actual presence of a physical or mental impairment is not a prerequisite for inclusion within the definition of handicapped. The regulations include individuals who have a history of a mental or physical impairment or are perceived as having such an impairment. In **Baines v. Washington Natural Gas Co.,**[19] an employee filed suit against the company under the state handicap statute alleging that his employer terminated him because he erroneously believed the employee was epileptic. The company moved to dismiss the action on the ground that the employee had asserted he was not epileptic and was therefore not covered by the state handicap statute. The court disagreed.

> [A] person who is perceived to be afflicted with epilepsy may be discriminated against because of his or her perceived handicap even though that perception turns out to be false . . . . The law's application . . . should not be limited to those who actually have handicaps, excluding those who are discriminated against in the

[7] **Cook v. United States Department of Labor,** 688 F.2d 699 (9th Cir. 1982).

[8] See **Scanlon v. Atascadero State Hospital,** 677 F.2d 1271 (9th Cir. 1982); **United States v. Cabrini Medical Center,** 639 F.2d 908 (2d Cir. 1981); **Carmi v. Metropolitan St. Louis Sewer District,** 620 F.2d 672 (8th Cir. 1980), **cert. denied** 449 U.S. 892, 101 S.Ct. 249 (1980); **Trageser v. Libbie Rehabilitation Center, Inc.,** 590 F.2d 87 (4th Cir. 1978), **cert. denied,** 442 U.S. 947, 99 S.Ct. 2895 (1979).

[9] 687 F.2d 767 (3d Cir. 1982).

[10] **Consolidated Rail Corp. v. Le Strange,** ___ U.S. ___, 36 D.L.R. A-8 (February 22, 1983).

[11] 41 C.F.R. § 60-741.2.

[12] **Vickers v. Veterans Administration, supra.**

[13] **Bentivegna v. Dept. of Labor,** ___ F.2d ___, 30 FEP Cases 875 (9th Cir. 1982).

[14] **Fischer v. Zenith Radio Corp.,** 30 FEP Cases 423 (Ill. Cir. Ct. 1979).

[15] **Lewis v. Remmele Engineering, Inc.,** 314 N.W.2d 1, 29 FEP Cases 576 (Minn. Sup. Ct. 1981).

[16] **Lewis v. Ford Motor Co.,** 282 N.W.2d 374, 29 FEP Cases 570 (Minn. Sup. Ct. 1979).

[17] **E. E. Black, Ltd. v. Marshall,** 497 F.Supp. 1088 (D. Ha. 1980).

[18] **Coleman v. Casey County Board of Education,** 510 F.Supp. 301 (W.D. Ky. 1980).

[19] 27 FEP Cases 1503 (Wash. Ct. App. 1979).

same way because they are only thought to have handicaps.[20]

The most interesting application of the definition of handicapped individuals concerns alcoholics and drug addicts. Several courts have held that the definition of qualified handicapped individuals includes alcoholics and drug addicts.[21] In each of the cases, the court found that the alcoholism or drug addiction substantially affected the individual's ability to perform major life functions. However, the courts have also been quick to point out that while alcoholism or drug addiction qualifies an individual as handicapped, he is not protected if his addiction affects his ability to do the job. For example, in **Squires v. Labor and Industrial Review Commission,**[22] the court upheld the discharge of an alcoholic employee since his alcoholism had rendered him unable to perform his job on a number of occasions. Thus, there was no violation of the state handicap statute.

Covered employers are required, under Sections 503 and 504, to make reasonable accommodations to the mental and/or physical limitations of handicapped individuals whom they employ unless it would cause undue hardship on the business.[23] The Supreme Court, in **Southeastern Community College v. Davis,**[24] stated that there is a distinction between evenhanded treatment of qualified handicapped persons and affirmative efforts contemplated by the term "reasonable accommodation."[25] The OFCCP feels that, when deciding whether a specific form of accommodation is reasonable, the employer should look at a number of economic **and** noneconomic factors, including

1. the cost of the accommodation,
2. the financial outlook for the employer,
3. the availability of openings for which the individual is qualified,
4. the possibility of relocating the individual, and
5. the size of the employer and whether this would impede accommodation.

Each of these factors has as its objective determining whether accommodation would be too costly or unduly disrupt the business of the employer. These in turn reflect whether accommodation would cause "undue hardship" for an employer.

The two recent cases **Treadwell v. Alexander**[26] and **Vickers v. Veterans Administration**[27] are examples of how the courts have applied the term "reasonable accommodation." In **Treadwell,** a Section 504 case, an individual with a heart condition applied for a park technician job with the Corps of Engineers. Because the arduous job duties involved in the position of park technician were beyond plaintiff's physical capabilities, he was rejected. The court found that any attempted accommodation would have created an undue hardship for the employer and was therefore not justified. To accommodate him, the Corps of Engineers would have had to require other park technicians to perform many or even most of plaintiff's duties. Doubling up on duties, the court held, would certainly impose an undue hardship on the corps. In **Vickers,** an employee filed suit under Section 504, seeking an affirmative injunction to force the Veterans Administration to provide him a work environment free from tobacco smoke. While the court found that the employee's sensitivity to tobacco smoke was a handicap as defined by the statute, it refused to rule for the plaintiff. The court found that, by segregating the desks of smokers and nonsmokers, by providing extra ventilation in the room where plaintiff worked, and by offering to move plaintiff's office, the Veterans Administration had adequately attempted to accommodate plaintiff's handicap.

Because handicap discrimination is a new and rapidly expanding area of employment discrimination law, it could catch the uninformed employer off guard and unprepared. It is therefore imperative that employers fully realize how the Rehabilitation Act and applicable state statutes affect them and how to handle potential problems. When confronted with a person who fits the definition of "handicapped," every effort should be made to reasonably accommodate that individual. While reasonable accommodation is hard to define, and while analysis of it is accomplished on a case-by-case basis, if an employer cannot show that sufficient accommodation was attempted or seriously considered, a covered employer is almost certain to have a legal problem regarding refusal to hire, or termination of, a handicapped person.

[20] **Id.** at 1506.

[21] **Simpson v. Reynolds Metals Co.,** 629 F.2d 1226 (7th Cir. 1980) (alcoholism); **Athanas v. Board of Education of School District III,** 28 FEP Cases 569 (N.D. Ill. 1980) (alcoholism); **Whitaker v. Board of Higher Education of the City of New York,** 461 F. Supp. 99 (E.D. N.Y. 1978) (alcoholism); **Davis v. Bucher,** 451 F.Supp. 791 (E.D. Pa. 1978) (drug addiction).

[22] 294 N.W.2d 48, 30 FEP Cases 398 (Wis. Ct. App. 1980).

[23] 41 C.F.R. 60-741.5(d).

[24] 442 U.S. 397, 99 S.Ct. 2361 (1979).

[25] **Id.** at 410, 99 S.Ct. at 2369.

[26] 27 FEP Cases 543 (S.D. Ga. 1981).

[27] ___ F.Supp. ___, 29 FEP Cases 1197 (W.D. Wash. 1982).

BUSINESS AFFILIATES

The Business Affiliates program of The USC-Business Partnership Foundation, chartered in 1977, is designed to attract business investment and participation in the programs of the College of Business Administration. Advantageous to both, this program benefits the business community through better prepared graduates and higher levels of professionalism of employees who participate in the graduate or continuing education programs, and the college through a new sense of relevancy and realism from corporate and business involvement.

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Those interested in participating in the Business Affiliates Program can obtain further information by calling or writing:

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Derrick, Stubbs & Stith
Elkay Industry
Elliott, Davis & Company
Ernst & Whinney
First-Citizens Bank & Trust Company of S.C.
First Federal Savings & Loan Assoc. of Camden
First Federal Savings & Loan Assoc. of Charleston
First National Bank in Orangeburg
First National Bank of S.C.
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Multimedia, Inc.
Mutual Savings & Loan Association of Greenwood
National Bank of South Carolina
North Carolina National Bank
Oneita Knitting Mills
Owens Corning Fiberglas Corp.
Peat, Marwick, Mitchell & Company
Peoples Federal Savings & Loan Association
PepsiCo, Inc.
Price Waterhouse & Company
Reeves Brothers, Inc.
Republic National Bank
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Singer Foundation
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S. C. Federal Savings & Loan Association
S. C. National Bank
Southern Bank & Trust Company
Southern Bell Telephone & Telegraph Co.
Spartan Foods
Springs Mills, Inc.
Standard Federal Savings & Loan Association
Standard Life
State-Record Company
Synalloy Corporation
Union Carbide Corporation
Uniroyal, Inc.
U. S. Shelter Corporation
W. R. Grace
Wachovia Bank & Trust Company
Wellman Industries, Inc.
Westinghouse Educational Foundation
Wilbur Smith & Associates

Safeguarding Your Data Center

By Sara Schechter-Schoeman

"Computer Crime — The Spreading Danger to Business?"
—**Business Week,** August 20, 1981

"Hurricane Shows Hawaii Needs D.P. Backup"
—**Computerworld,** December 6, 1982

"Expert Studies Possible Quake in Charleston"
—**The State,** November 11, 1982

"Former IBM Employee on Shooting Spree Kills Two at Maryland Division Office"
—**Computerworld,** June 7, 1982

If you are a manager in business or government, you may wonder what the above captions and comments have to do with you. Safeguarding computer resources from natural or man-made catastrophes is probably something you feel is a technical matter more appropriately left to those who talk of modems and controllers and disk packs rather than those whose concern is spread sheets and the company's "bottom line." If this is your perspective, consider just one question: "How long could your organization survive without its computer?" Several months? Several weeks? As the following graph indicates, operational business activities could be reduced to 21 percent of normal within only seven and a half days of failure of your company's computer system.

The same business study at The University of Minnesota found that

> most business functions ceased to operate within one week of the data center failure while another group of functions was lost after the second week. Most operations for finance, manufacturing, and distribution were lost in the first week after failure. These included order entry, invoicing, accounts receivable, general ledger accounting, and demand deposit accounting.[1]

Operational Business Activities

If you are a manager in government rather than in the private sector, you may feel you need not worry because, as everyone knows, governments don't go out of business. While this is true, think of the consequences if financial applications couldn't be run by computer, or if a computer-assisted life support system in a county or university hospital were to fail.

Computerized data, programs, and equipment are at the heart of modern society. The gravity of the consequences of computer system failure to both the private and public sectors argue strongly for the involvement of general managers as well as data processing managers in disaster and security planning for computers. This issue is important enough to merit the attention of corporate and governmental managers of any data center of significant size.

According to **EDPACS,** the EDP Audit, Control, and Security Newsletter,

> it is estimated that far fewer than 10 percent of computer users have formal plans for recovery should a disaster hit their automated data processing equipment. Many users have no plan at all. Out of those who do report having such a plan, few will claim that it has been tested and will work . . .[2]

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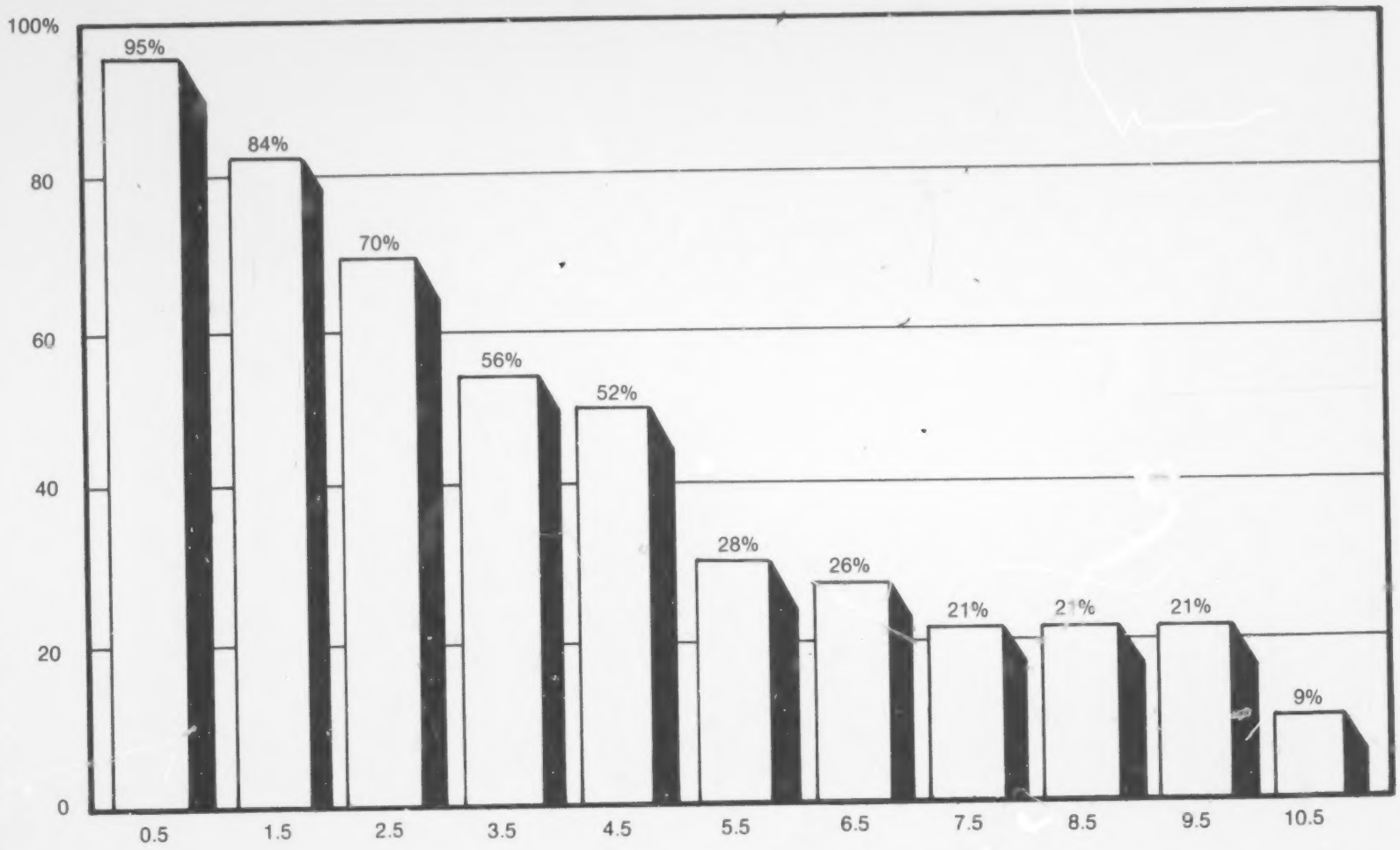
[1] p. 23.

[2] October 1982, p. 23.

FIGURE: Extent of Operational Business Activities for All Industries During the Two Weeks Following Complete Data Center Failure.



Source: **An Evaluation of Data Processing "Machine Room" Loss and Selected Recovery Strategies,** Management Information Systems Research Center, The University of Minnesota at Minneapolis, MN (1978). Reproduced by permission.

HOW SIGNIFICANT ARE THE RISKS?

Neither increasing computer dependency nor possible disastrous consequences from computer system failure would be enough to make contingency planning a valid concern were it not for the fact that computers and the data contained within them are subject to a wide variety of hazards, both natural and man-made. It is tempting to think that natural catastrophes happen only in disaster-prone areas like California, and human ones in the megalopolis region of the Northeast. However comforting this view, it is illusory. A study conducted by the Council of State Governments, **The States and Natural Hazards** (1979), has found that South Carolina is a region of high risk for at least three types of natural disasters: hurricanes, windstorms, and earthquakes. Though it may not be widely known, the United States Geological Survey classifies South Carolina as a "major earthquake hazard zone." In 1886, the City of Charleston was virtually destroyed by an earthquake and a federally funded study is now under way to assess what damage might be expected to occur in the Low Country in the event of a future earthquake of similar intensity.

The damages posed by high winds and hurricanes are a more apparent, as well as a more likely, risk than earthquakes. The fact that no major hurricane has hit the coast in a number of years has lulled residents into a false sense of security. According to forecasters, this state is long overdue for a severe hurricane. Since hurricane paths are notoriously unpredictable, even areas a hundred or more miles inland could be devastated. Tornadoes, soil subsidence, and flash floods, too, pose higher than normal risks to the state.

In addition to these regional hazards are other risks based on the particular vulnerabilities of individual computer sites. Among these are threats of fire and water damage and inadequate physical security and structural problems, particularly in older buildings which were never designed to house computers.

In the realm of man-made disasters, terrorism and bomb threats, which plague some large urban areas, are a more remote threat in South Carolina but other types of incidents can and do occur. Recently, one state agency's offices were broken into and ransacked, though fortunately the computer itself was not reached. Another potential risk is posed by terminated employees who may still have access to the computer after termination notice, but before their last day at work.

WHAT SHOULD A MANAGER DO?

Every organization that depends heavily on computers has an obligation to its shareholders and/or the public to institute a broad-base contingency planning process for computer center disasters. This process must involve efforts toward identifying and, wherever possible, minimizing or eliminating risks. It must also include a plan for resuming full operations as speedily as possible in the event a disaster does occur. The three major steps in this process are

1. an assessment of vulnerabilities including the organization's status with regard to insurance coverage, data security, physical security, and disaster planning;
2. the development of a disaster preparedness and recovery plan; and
3. periodic testing of the plan.

How detailed the process should be would depend on the complexity of the business, how critical the computer applications are, and a realistic assessment of the potential risks. A modicum of common sense is required, too. I have reviewed planning methodologies that insist an organization plan for the very worst that could possibly happen. Carried to its logical extreme, this approach would suggest that a company devote a significant amount of its resources to developing a contingency plan for continuing or resuming computer operations in the event of full-scale nuclear attack.

Whatever resources an organization does decide to devote to contingency planning, it must be stressed that it would be a mistake to view the issue as merely a technical one. It is a **business function.** At every stage of the process management support and involvement are critical, for several reasons. First of all, however unlikely the odds, if a computer center disaster should occur, the survival of the entire organization, not just the data processing center, might be at stake. Furthermore, the authority to commit adequate resources to this effort will come from outside the data processing area. One reasonable way to approach this effort is to form a team that includes high-level management as well as technical participation.

Step 1: Assess the Risks

Reviewing insurance coverage may be the

easiest step but should not be neglected because even the most comprehensive and up-to-date contingency plan will be useless if the financial impact of a computer-related disaster would destroy your organization. Several types of computer risks should be included in your policies. The need for casualty coverage for data processing equipment is obvious, but the issue isn't as simple as it sounds. Are you covered against the special risks (such as power surges or temperature extremes) to which computer equipment is especially vulnerable, as well as the more generic risks of flood or fire damage? Does your insurance cover losses resulting from your use of a computer not located on your property? If your equipment is leased, who bears the risk of loss — you or the equipment vendor? If you have any newly acquired equipment, is it covered? What if your computer is destroyed in transit?

The media (tapes, disks, or cards) on which the organization's data are stored should be insured, as should the value of the information itself. Coverage for extra expenses such as equipment rental, transportation, and employee housing at a backup site in the event of the destruction of your primary site might be wise. In addition, you might consider business interruption insurance to cover income lost as a result of a computer disaster. These suggestions only touch the surface. Your insurance carrier should be able to provide you with more information.

Potential gaps in insurance coverage are only some of the many weaknesses your contingency planning team may uncover. Don't neglect an assessment of the risks to your physical facility, particularly if you are in the fortunate position of considering the construction or purchase of a new building. If you are contemplating building near a river, do you know the location of the 10-year and 100-year flood planes? In case you are planning to put your computer in the basement, could water seepage be a problem? Conversely, if you decide to locate your computer in the upper stories of a building to be above the level of potential flood damage, will it also be above the reach of your city's fire fighting equipment? Are you thinking about having the computer next to a storage area or cafeteria where fire could be a greater hazard? Do building directories or glass windows "advertise" the location of your computer? Among the factors to be examined in an existing structure are access controls, fire fighting and fire detection systems, power systems, and environmental controls. Controls over access to the computer itself are extremely important because more computer failures are caused by human action than by natural disasters.

For those organizations that operate in a distributed data processing environment, have you considered the increased risks from having terminals or computers located away from the relatively greater security of a computer room? If you have a computer network connecting many terminals, how secure are your organization's most confidential files? Have you considered the possible threat posed by disgruntled former employees who may know how to get into your computerized data even when they no longer have physical access? Perhaps the most important question is whether you maintain up-to-date backup copies of critical files and secure them in a safe spot somewhere other than in the computer building.

These questions are by no means complete, but are suggestive of the broad range of concerns you need to consider in assessing your organization's vulnerability to a computer disaster. In many cases, changes made in response to a comprehensive risk assessment will help to prevent a disaster from occurring, a distinct benefit of this process.

Step 2: Develop the Plan

Since it is impossible to eliminate every potential risk, the next logical step is to develop a contingency preparedness and recovery plan in the event a disaster does occur. The details of the plan must be worked out with the involvement of both managers and technical employees who have the greatest familiarity with the organization's data processing environment and procedures. It is critical that general managers have at least a basic knowledge of the contents of the plan because they may be called on to exercise emergency powers in the event of a crisis. At a minimum, the plan should contain the components discussed below

1. **A list of all computer applications, by priority.** A list of computer application areas (programs) is a vital part of the contingency planning process. The normal operation of business is impossible in the event of a disaster. Therefore, those application programs critical to an organization's survival must be identified so that they can be given priority during the recovery process. It is essential that management be involved because the designation of critical applications must reflect the priorities of

the organization as a whole, not just an individual section. Since this process can be rather time-consuming, it needs to be done **before** a disaster, not as an after-the-fact recovery effort.

2. **An inventory of equipment and a hardware configuration (location) chart.** A complete inventory of hardware and software is essential. This will provide a convenient means for gauging losses and for securing replacements in the event of a disaster.

3. **Specification of backup sources for personnel, data communications equipment, computer equipment, supplies, and an alternative processing site.** A further component of the plan is the identification of alternative resources if personnel, equipment, supplies, or even the building itself are unavailable. Supplies are a frequently neglected item. A variety of options are available if a computer or the building that houses it becomes temporarily or permanently unusable. These include reciprocal agreements with other organizations, vendor replacement, or contracts with commercial backup sites.

   Voluntary reciprocal agreements sound promising because they involve no financial commitment, but they may be worth about what they cost. Because they are voluntary and rely on the good will of another organization, there is no guarantee that in an actual crisis the backup site will have the willingness or capacity to provide adequate computer time to the "guest." Even assuming a generous "host" with a very large computer, it is unlikely this sort of relationship could last, for example, until a destroyed building is replaced.

   Computer manufacturers have a good track record for promptly replacing destroyed equipment but will seldom commit themselves in writing, which is a reasonable ground for concern. Furthermore, a replacement computer wouldn't be of much help if the building that is to house it is unusable. Agreements with commercial backup facilities are not subject to these problems. They are costly, however, and might be inconvenient since there are not many of them nationwide. The nearest one could easily be located a good distance from your place of business.

4. **An emergency plan.** The emergency plan itself should serve several functions. It must provide an automatic "escalation clause" which can set into motion procedures designed for containing a crisis. Early identification of a disaster can be critical for early recovery. During an emergency, a prompt, almost automatic response will be more helpful than the normal cautious, deliberative managerial decision making. Of most importance, the plan must clearly specify procedures for protecting people, property, and data in the event of an immediate physical threat.

5. **A personnel notification list.** The personnel notification list should contain names, job titles, phone numbers, and the order in which employees should be notified in case of a disaster. It must specify the particular functions to be performed by each appropriate employee during the crisis and recovery phases. Furthermore, it should designate alternate employees for each emergency function in the event the primary employees are unavailable.

Step 3: Test the Plan

If you have come this far and have a contingency plan, off-site storage, and a backup processing agreement, you may still have unanticipated problems if you've never tested them in a simulated emergency situation. Even if a computer and its backup are the same size and model number, differences in operating systems or small changes in software could prevent the programs for one computer from running easily on the other. The extent of the problem would not be known without a test.

Other possible problems are less subtle. In one situation a test of a corporation's contingency plan uncovered the fact that no one had a building key for entering the off-site storage facility on evenings or weekends. In another case, a business realized that all copies of its contingency plan were kept in the computer room and could be destroyed along with the computer.

It is essential that the entire disaster recovery plan be tested at one time to make sure that all the parts that seem consistent on paper actually work together as needed. This testing could be incorporated into an annual review of disaster preparedness, a step I strongly recommend.

Suggested Readings:

Automation Training Center, Inc., **EDPACS,** The EDP Audit, Control and Security Newsletter (Reston, Virginia). Any volume.

Larry Cooke, "Survival! A Perspective on Disaster Recovery," **Computerworld** (August 23, 1982): 9-14.

David Kull, "Disaster Recovery — Just in Case," **Computer Decisions** (September 1982): 180-209.

U.S. Department of Commerce, National Bureau of Standards, **Guidelines for Automatic Data Processing Physical Security and Risk Management,** FIPS Pub. #31 (Washington, DC: Government Printing Office, 1974).

Getting Started With Office Automation

By William J. Kettinger

There are numerous areas in most businesses and governments where costs can be cut, where productivity can be increased, and where new management approaches can be taken. In the case of manufacturing, the use of robotics in the production process has captured everyone's imagination, and the enthusiasm surrounding the application of Japanese management approaches, such as quality circles, has reached almost religious proportions. But, one area that is often overlooked is office productivity.

The office environment of a firm can range from the small front office of a manufacturing facility to the many paper-intensive departments of a financial or governmental organization. The office, if managed effectively, can be highly productive, or if left to its own devices, can be costly and counter productive. The time is right for managers to confront the problem of operating costs in the office by introducing programs to improve office worker productivity.

William J. Kettinger is Associate Director of the Institute of Information Management, Technology and Policy of the College of Business Administration at The University of South Carolina. He earned his B.S. Degree at Northeastern University and his M.P.A. Degree at the University of Massachusetts at Amherst. Kettinger was previously an Information Technology Specialist with the Bureau of Governmental Research at USC where he was responsible for consultation, research, and training concerning the use of computers in government. He has also served in a number of administrative and research positions within state and local government, and was Study Manager for the State Office Automation Pilot Study.

Offices are still largely labor intensive, employing a large number of "knowledge" workers such as managers, administrators, accountants, salesmen, programmers, personnel workers, attorneys, researchers, and engineers, along with the armies of clerical workers who support these professionals. Office workers spend most of their time absorbing, handling, or disseminating information — among themselves as well as with customers, clients, and vendors. In the case of most organizations, the amount of information these workers must deal with continues to grow.

Many technology vendors contend that the "office of the future" will respond to these problems with equipment that augments human potential by eliminating drudgery and monotonous routine and by reducing the time dedicated to these overhead activities. Furthermore, most communication will be carried out electronically, with significant reductions in the amount of labor required. This trend toward electronic storage and transmission of information is leading to what is variously known as the "paperless office," the "automated office," and the "office of the future." The expectation is for large productivity gains in such office functions as typing, proofing and editing, handling correspondence, filing and retrieving reports, performing research, drafting documents, scheduling activities and meetings, developing graphs and presentations, handling telephone calls, copying, and mailing.

The term "office of the future" is really a misnomer: most components of office automation are available now! The most pressing problem that managers face is justifying the cost of office automation, choosing what to buy from an array of products, and making productive use of the equipment. This article takes a look at the

equipment that makes up office automation. Here the components are reviewed as separate entities, although there is considerable overlap among them in that one device may possess some of the capabilities of other systems.

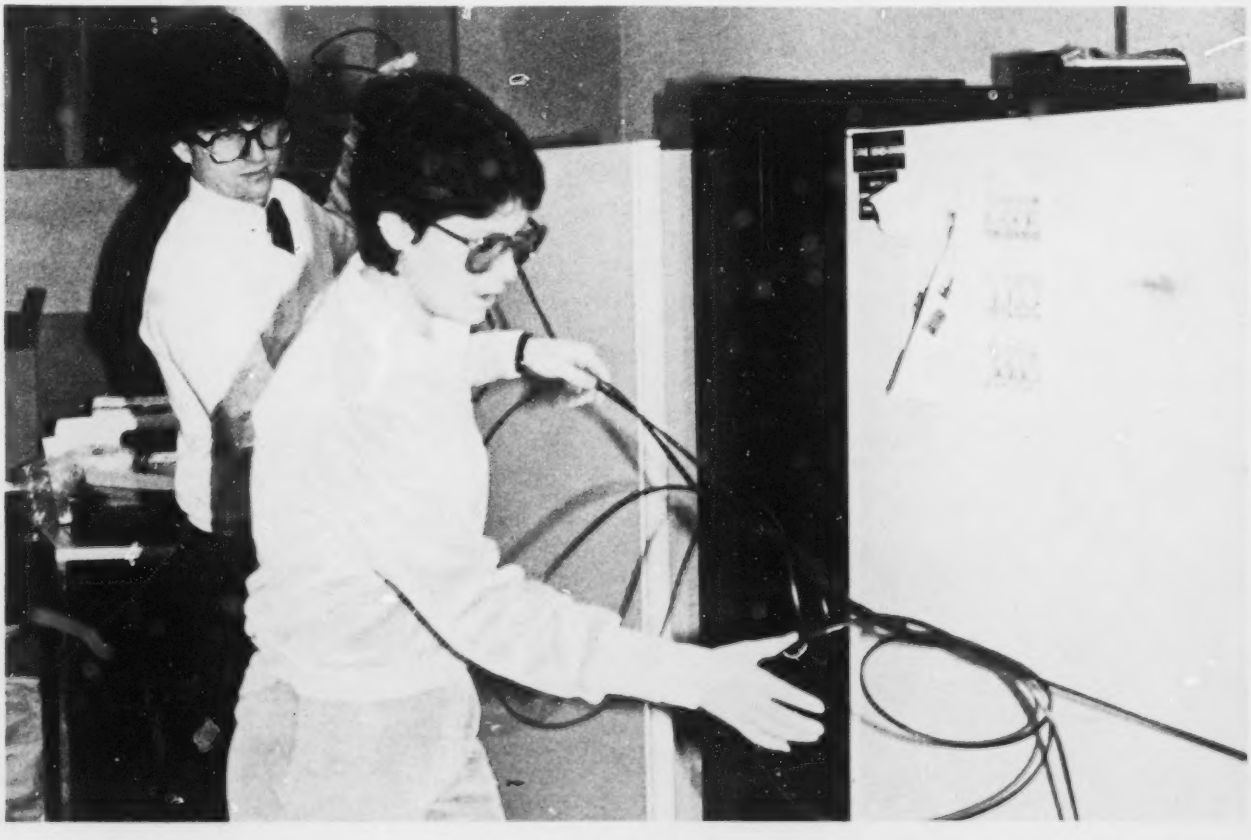
COMPONENTS

Word Processing

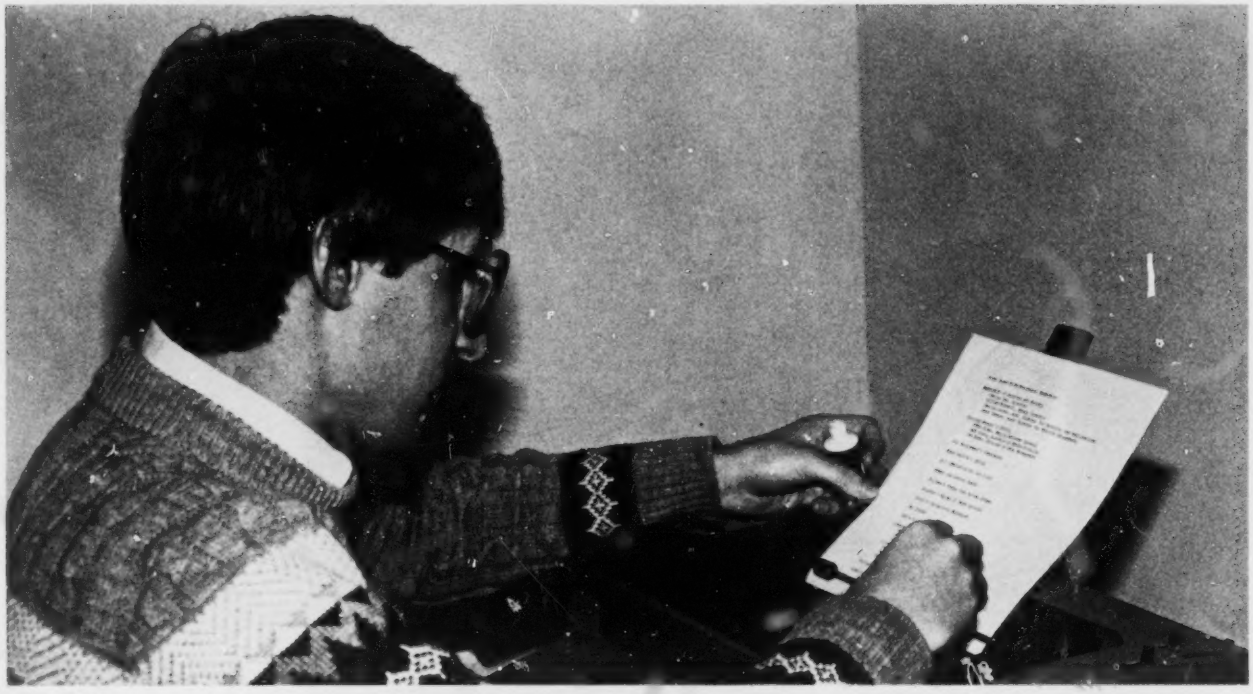
Word processing is undoubtedly the most prevalent and visible tool to emerge in the office automation arena. Considered by many to be the cornerstone of the automated office, word processors manipulate, edit, and format text to facilitate the production of typed correspondence and reports. The editing and format tasks are performed via a display screen. Rough drafts or finished texts can be printed immediately at high speeds, or centrally stored within the machine's storage devices.

The basic word processing system contains a microprocessor "memory," keyboard, a television-like monitor, a disk drive for storage, and a printer. There are basically three categories of word processors.

1. **Standalone Word Processors** function independently of any external computer. These systems utilize a microcomputer that can enter text, check text against a full-hyphenation and spelling dictionary, proportionally space and justify typed and printed material, prepare dunning letters for overdue accounts — carrying an itemized list of unpaid items, and automatically prepare and personalize other kinds of letters and reports.
2. **Clustered Systems** operate on either a "shared logic" or "distributed logic" basis. In a "shared logic" system, a central processor supports a number of remote input units and output terminals. With a "distributed logic" system, each component is endowed with its own intelligence and can operate semi-independently. Since these machines have intelligence, they possess many capabilities of full-fledged computers. By upgrading the programming (software) for word processors, they can perform such tasks as alphabetical or numeric sorting, mathematics, or records retrieval. Most of



With state-of-the-art technology, if you can untangle cable, you can wire your word processor or personal computer during lunch and be ready for work in the afternoon.



The traditional office is heavily dependent on correction fluid, scissors and paste, and carbon copies to produce a finished document.

these devices use packaged, preprogrammed software which can be purchased from the vendor. Many word processors on the market today, however, allow individual users to program them to tailor their function to specific needs.

3. **Multifunction Work Stations** allow an individual to have access to both word processing and data processing capabilities on the same computer terminal. This multifunctionality is available through data processing systems with specially designed software that allows a user to switch his terminal from traditional data processing to word processing applications at the touch of a finger. These systems contain most of the same technical components as traditional data processing systems, with the addition of letter quality printers and word processing oriented keyboards.

Professional Work Stations

By the end of the decade, most managers and professionals will work with personal desk top computers and well-designed, flexible work stations that make computer processing and data storage resources instantly and interactively available for compiling, interpreting, and analyzing information. Systems currently on the market range in size and type from the simple personal or desk top microcomputer that can be purchased at computer retail stores, to sophisticated professional work stations that have been customized to meet the information needs of specialized knowledge workers. It is hoped that access to timely, accurate, and appropriate information will substantially increase the decision making effectiveness of these professionals. In addition, the text editing capabilities will eliminate the need for continuous retyping of documents.

Professional work stations include software and memory facilities for storage of both incoming and outgoing documents and correspondence, as well as powerful automatic indexing and data management capabilities. Specific documents such as contracts, office reports, purchase orders, and sales data can be retrieved within seconds. The equipment is also capable of "information tracking." This tracking entails quick checks into the status of requests and, when necessary, automatic reminders to those whose answers are tardy. Similarly, these systems can check the spelling of words, keep a personal telephone directory, run business plans and spread sheets, and maintain master and individual "calendars" of meetings, appointments, deadlines, and other time sensitive events. Finally, many of the devices are now operating with powerful color

graphic software that allow data to be presented in easily understood business graphics, such as pie, linear, and bar charts.

Electronic Mail

An electronic mail system is an alternative to postal service, private carriers, and intercompany mail delivery networks that carry mail physically. It transmits messages (letters, memos, contracts, mailgrams, telegrams) via an electronic communications network (telephone, wire, radio, cable, TV, satellite). The system may incorporate various kinds of equipment, including message terminals, small computers, intelligent copiers, and word processors. All of these systems will offer some, if not most, of the following services: built-in levels of priority and confidentiality, message filing, optional hard copy print, message routing, automatic message acknowledgement, and multiple address routing.

There are essentially three variations of electronic mail.

1. **Common Carrier-Based Systems and Public Postal Services** are likely to provide document distribution. The U.S. Postal Service and private common carriers will probably soon offer next-day delivery through a domestic electronic message service.
2. **Facsimile Systems** involve scanning a document in one location, converting that information into electronic pulses, and transmitting the pulses over a telephone line to a facsimile receiver at another location that then reproduces the document.
3. **Computer-Based Message Systems** are the most sophisticated form of electronic mail, allowing the greatest overall functionality. These systems usually operate within a company-owned information system and require a common network and software that permit word processors, professional work stations, and other compatible devices to communicate. These systems permit the user to access his incoming messages at his convenience, to dispose of them electronically, and to file, display, or pass them along as he sees fit.

Teleconferencing

Professionals spend much of their time in meetings. Many meetings require more than two persons in different locations. Teleconferencing

With word processing systems, editing is reduced to a few key strokes, resulting in increased productivity, decreased costs, and a polished document.

means holding multiparty meetings over communication links connecting two or more sites. Advantages of teleconferencing include reduced travel costs and time savings. There are two major forms.

1. **Audio Teleconferencing.** The participants communicate by telephone (voice) and sometimes transmit graphic material using special equipment. Employees can set up conferences from their own desks without going through an operator, and conferees can talk in normal tones with their hands free, using high-quality "speaker phones."
2. **Video Teleconferencing.** A large number of remote groups can directly communicate through television images with sound. Participants can see each other on television monitors, either in full motion with "zooming capability" or via the "freeze" or "still frame" technique. The moving pictures can be retained on videotapes or videodiscs for later reference, and "hard copies" of still frames can be prepared.

Intelligent Telephones

With the release of microprocessor-based telephones and electronic switching devices, we have entered the era of the "intelligent telephone." New "smart" telephones provide automatic call routing, dialing, paging, and forwarding, and thereby eliminate the need for centralized manned switchboards. In addition, computer switchboards (APBXs) can automatically link office personnel performing various office functions, and can also monitor and control security alarms, lights, thermostats, airflow, and the flow of data, text, and computer messages. They will also continually adjust to the most efficient call routing pattern and take detailed message records for control and billing purposes. With the deregulation of the Bell System, many smaller telecommunication companies have burst on the marketplace, and the competition has resulted in an array of new products and varying price ranges of equipment.

Optical Character Readers

Optical character readers (OCRs) are able to screen a piece of paper containing text on numeric data, convert the information to digital form, then transfer it to the memory of a computer. Scanning eliminates key stroking of information and can include supplemental pictorial material. Text editing, facsimile, reproduction, storage and retrieval, and printing can then be carried out on the stored information. One application of OCRs can be to scan and route mail and file material by converting paper messages to electronic media and transporting this information via electronic mail to distant locations.

Intelligent Copiers and Printers

The merging of computer, xerography, communications, and nonimpact printing technologies has opened a new generation of printers and copiers. Rather than being standalone devices, intelligent copiers can communicate directly to computers and word processors through direct, hard-wire connections. They can prepare original documents from data sent by the computer and produce drafts or volume printings. These devices can accept a wide variety of paper stock and perform good quality, rapid printing chores at moderate prices. They can also produce color, change fonts, alter format, adjust size, and enhance original quality. Various nonimpact printers on the market use fiber optics, laser, and ink jet technologies. All these variations require a minimum of operator attention to copy or print attractive brochures, reports, halftone photographs, pamphlets, booklets, and other message forms.

Micrographics

One of the biggest problems in today's office is "paper pollution." Micrographics systems currently on the market can automate information storage and retrieval so that paper need only appear when it is desired. Micrographics techniques (microfiche, microform) have been improving steadily over the past decade; systems can now interface with computers to store and generate information on demand. The variety of systems range from simple step-and-repeat cameras and viewers, to fully automated centers that include cameras, computer output microfilm (COM), processors, cross-referenced retrieval, archival storage, and "intelligent" viewing stations.

Telecommunications: Tying It All Together

While most of the equipment and systems previously described were originally conceived as discreet and relatively independent developments, the automated office will have numerous options for integrating them. Word processors can be linked to computers, computers can be tied directly to copiers and micrographic equipment, optical character readers can be linked to facsimile machines, personal desk top terminals can be tied to electronic mail systems, and all the electronic pulses needed to operate this technology can be

transmitted over telephone lines or other telecommunication facilities. Telecommunication networks are the glue that connects these technologies. Across shorter distances, telecommunication networking options ranged from dedicated point-to-point connections for every piece of office equipment to sophisticated "local area networks" where machines compete for, and share the use of, the same lines of communication. Various long-distance communication options now include telephone lines, microwave, fiber optics, and satellites.

GETTING STARTED

The boundaries between office technologies are becoming more and more blurred as the various components of the office become interconnected. But integration means more than placing machines side by side in a room. It means taking a management approach whereby the configuration, placement, and application of office technology are dynamically planned and controlled to meet the changing needs of the organization. While the opportunity for time savings and improved quality of office productivity does exist, office automation should not be viewed as the productivity panacea. To achieve productivity benefits, realistic productivity expectations must be established and a concrete office automation selection and implementation plan developed.

The following is offered, not as an exhaustive list, but rather as a helpful guide managers might consider when introducing office automation.

1. **Get a grasp of the office automation marketplace.**
   —Read some articles and magazines on office automation.
   —Visit a similar company or agency where office automation is being used.
   —Visit different vendors to see what they offer. But don't jump too quickly at any particular product!
   —Don't be afraid to seek outside help from a consultant or university group.

2. **Develop an OA plan and management approach.**
   —Identify those applications that offer immediate productivity benefits (cost reduction or improved quality of information).
   —Identify possible future applications of office automation, and remember not to buy equipment now that can't be upgraded to meet future needs.
   —Determine a reasonable level of expenditures for office automation start-up, and make some projections about when productivity benefits should offset original costs.
   —Determine how office automation will fit into your bigger information management picture. (Will it be under the control of MIS, Finance, etc?)

3. **Develop base line measures of office automation application areas to determine productivity benefits over time.** Consideration here might be given to the size and complexity of the information processing task, the routinization of the task, the importance of the task, and the cost of the task.

4. **Document your functional and technical specifications for office automation in a written proposal and submit it to a number of vendors to get a comparison of prices and approaches.** You may be surprised what a little competition can do to vendor price quotations!

5. **Develop a strategy that deals with the personal issues related to the introduction of technology.**
   —Prepare employees for changes in their work envrionment.
   —Be prepared for requests for job changes and upgrades resulting from new or additional responsibilities.
   —Develop and conduct a comprehensive training program when introducing equipment.

6. **Implement the equipment in phases, or use pilot sites to avoid radical disruption of vital office activities.** It is usually a good idea to run parallel systems (manual and automated) until all kinks are worked out of the new system.

7. **Monitor your productivity expectations, and adjust your plan accordingly.**

Suggested Readings:

Robert Landau, James H. Bair, and Jean H. Siegman, **Emerging Office Systems** (Norwood, NJ: Ablex, 1982).

David J. Oborne, **Ergonomics at Work** (New York: John Wiley & Sons, Inc., 1982).

Ronald P. Uhlig, David J. Farker, and James H. Bair, **The Office of the Future: Communication and Computers** (New York: North Holland, 1979).

The Management Bookshelf

By Dwight Gardner, Business Librarian, M.B.A., M.S.L.S.

The Management Bookshelf is a service to our readers provided by the Elliott White Springs Library of the College of Business Administration of The University of South Carolina.

THE INVESTOR'S GUIDE TO STOCK QUOTATIONS AND OTHER FINANCIAL LISTINGS

by Gerald Warfield
Harper and Row Publishers, Inc.
10 E. 53rd St.
New York, NY 10022
1983, 384 pp., $25.00 cloth, $10.95 paperback

This title covers in detail stocks, bonds, money markets, mutual funds, futures markets, and stock options. It illustrates and analyzes the quotations originating from stockbrokers, business journals, and newspapers, and includes information on bond ratings, definitions of important investment terms, and a listing of the abbreviations of stock trading names.

WHITE COLLAR PRODUCTIVITY

by Robert Lehrer
McGraw-Hill Book Co.
1983, 345 pp., $24.95

Lehrer presents management strategies for enhancing both the job performance and the quality of work life of white-collar and knowledge workers within a variety of organizational settings. His recommendations include improved office technology, better work measurement, common staffing systems, and work simplification.

WORLD PAYCHECKS: WHO MAKES WHAT AND WHY

by David Harrop
Facts on File, Inc.
460 Park Ave. South
New York, NY 10016
1982, 192 pp., $12.95

Harrop continues the analysis of jobs and salaries he began in **America's Paychecks,** but this time on an international level. He presents data on pay scales and prestige for comparable jobs on a country by country basis, covering both white-collar and blue-collar occupations in a wide variety of fields, including business, education, law, and sports.

WORD PROCESSORS AND INFORMATION PROCESSING

by Dan Poynter
Para Publishing Co.
Box 4232-88
Santa Barbara, CA 93103
1982, 172 pp., $11.95

This practical guide introduces the prospective buyer to the products and services available in the word processing field. It also lists sources to follow-up for further information.

EXECUTIVE SUCCESS: MAKING IT IN MANAGEMENT

Edited by Eliza Collins
John Wiley & Sons, Inc.
P.O. Box 092
Somerset, NJ 08773
1982, 250 pp., $22.95 regular price, $18.95 subscription price.

This is the first volume of a planned eight-volume set entitled **Harvard Business Review Executive Book Series.** Each volume is a compilation of reprints of significant articles exploring a topic of interest to decision makers drawn from past issues of the **Harvard Business Review.** This particular volume covers the personal, organizational, and leadership skills required to be a successful manager.

ENTERPRISE

by Eric Sevareid and John Case
McGraw-Hill Book Co.
1221 Ave. of the Americas
New York, NY 10020
1983, 213 pp., $12.95

Tied in with the television series "Enterprise," this volume is designed to introduce some of the basic concepts of business enterprise to the general public. It accomplishes this by demonstrating through detailed case studies of such companies as Kentucky Fried Chicken and Levi Strauss a key business concept in action in a real world situation.

STATISTICAL INDICATORS OF SOUTH CAROLINA BUSINESS

ITEMS	December 1982	December 1981	Latest Month Percentage Change From Year Ago
Total Bank Deposits ($ millions)	$7,869.7	$6,372.7	+ 23.5
Demand	3,174.8	2,972.8	+ 6.8
Time	4,694.9	3,399.9	+ 38.1
Total Bank Loans ($ millions)	N.A.	N.A.	—
Savings in Savings and Loan Associations ($ millions)	$6,150.6	$5,772.8	+ 6.5
Sales and Use Tax Collections ($ thousands)	$49,967.7	$49,767.9	+ 4.0
Labor Market:			
Civilian Labor Force (thousands)	1,474.1	1,413.7	+ 4.3
Employment	1,310.2	1,283.4	+ 2.1
Rate of Unemployment (percentage)	11.1	9.2	+ 20.7
Nonfarm Wage and Salary Employment (in thousands)	1,179.4	1,195.1	- 1.3
Manufacturing	352.9	381.7	- 7.5
Contract Construction	66.7	67.9	- 1.8
Transportation and Public Utilities	54.3	54.5	- 0.4
Wholesale and Retail Trade	242.2	235.8	+ 2.7
Finance, Insurance, and Real Estate	51.9	50.0	+ 3.8
Services, Mining, and Miscellaneous	173.3	167.2	+ 3.6
Government	238.1	238.0	—
Average Hourly Earnings, All Manufacturing (in dollars)	$6.92	$6.42	+ 7.8
Initial Unemployment Claims Filed in South Carolina	85,152	79,578	+ 7.0
Placements by South Carolina Employment Offices (nonagricultural)	3,161	3,084	+ 2.5
Indexes of Prices Received by Farmers (1977=100)			
All Farm Products	126	118	+ 6.8
All Crops	157	145	+ 8.3
Livestock and Products	88	84	+ 4.8
S.C. Parity Ratio	81	79	+ 2.5
New Motor Vehicle Registrations			
Cars	6,593	5,790	+ 13.9
Trucks	1,590	1,628	- 2.3

	December 1982	December 1981	First 12 Months 1982	First 12 Months 1981	Percentage Change
Valuation of Building Permits Issued ($ millions)					
Total for all S.C. Counties	$167.5	$181.5	$1,810.0	$1,729.7	+ 4.6
Available County Data					
Aiken	1.8	6.4	31.7	38.6	- 17.9
Berkeley	7.9	16.1	46.6	45.4	+ 2.6
Charleston	15.7	19.2	216.0	246.9	- 12.5
Dorchester	5.5	1.8	36.4	29.4	+ 23.8
Lexington	9.8	3.9	78.0	54.7	+ 42.6
Richland	10.0	7.2	198.0	143.1	+ 38.4
Greenville	32.9	18.9	197.1	169.3	+ 16.4
Pickens	1.4	2.8	18.2	32.8	- 44.5
Spartanburg	1.9	5.7	69.3	117.9	- 41.2

[a]Less than one-half of 1 percent.

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Information Management: Part II

Volume XXIX, Number 6
July 1983

"Information Management, Technology, and Policy: An Introduction"
by Sena Hoosenally Black

"Managing Information Resources in South Carolina State Government"
by Larry L. Hamilton and Ted L. Lightle

"Information Technology and Technical Education"
by Jack A. Powers

"The Employer and Employment Laws"
by James J. Baldwin

"Information Management and Productivity in Industry: The Alumax Experience"
An Interview With Michael G. Kazeel
by Sena Hoosenally Black

"Information Resource Management in Banking"
by Thomas G. Ash

"The Management Bookshelf"
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Statistical Indicators of South Carolina Business

Summary of Contents

3 **Information Management, Technology, and Policy: An Introduction.** In this brief introductory article, Sena Hoosenally Black, an Information Resources Specialist for the Institute of Information Management, Technology and Policy in The University of South Carolina's College of Business Administration, looks at the emergence of the Information Age and discusses the various facets of information management covered by the authors contributing to **Information Management: Part I and Part II** (last issue and this).

4 In **Managing Information Resources in South Carolina State Government,** Dr. Larry L. Hamilton and Ted L. Lightle, Director of the Information Technology Planning Office at the South Carolina State Division of General Services and Acting Director of the Division of General Services, respectively, tell how state government in South Carolina is making the transition to an information resource management environment.

7 In **Information Technology and Technical Education,** Dr. Jack A. Powers, Coordinator of Innovative Technical Training at the South Carolina State Board for Technical and Comprehensive Education, discusses the TEC Board's "Design for the Eighties," a plan for the TEC schools prompted by the rapid technological changes in business and industry.

11 **The Employer and Employment Laws,** a regular feature by James J. Baldwin, Partner in the law firm of Haynsworth, Baldwin, Miles, Johnson, Greaves and Edwards. In **The Hidden Pitfalls Behind Plant Closings or Relocations,** Baldwin warns employers that plant closings and relocations improperly handled can result in costly legal proceedings.

16 Alumax of South Carolina, Inc. was designed to embody the latest in technology — not only in manufacturing facilities but also in terms of an information system that monitors production, quality control, and administration. In **Information Management and Productivity in Industry: The Alumax Experience,** Sena Hoosenally Black interviews Michael G. Kazeef, Alumax's Vice-President and General Manager, on that company's innovative concepts.

18 Here Thomas G. Ash, Senior Vice-President in charge of the corporate information processing function of the First National Bank of South Carolina, shows why effective **Information Resource Management in Banking** is a prime factor contributing to the success and profitability of banks.

23 **The Management Bookshelf,** a regular feature in which Dwight Gardner, USC BA's Business Librarian, reviews books of interest to business practitioners.

24 **Statistical Indicators of South Carolina Business.** A regular feature, listing the latest available data.

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Opinions expressed in this publication are those of the authors, and not necessarily those of the Division of Research or the University.

Articles submitted for consideration for publication should concern business and economics topics of interest to managers in the private or public sectors. All manuscripts should be 12-26 double-spaced, typewritten pages, in English. Graphs, mathematical and quantitative data, charts, and tables are acceptable. Authors should submit 2 copies of each manuscript plus a vita sheet and a photograph. Upon publication, 6 complimentary copies of the journal are sent to the authors, with additional copies available upon request. Manuscripts to be considered for publication should be sent to: Virginia Ann Van Seters, Associate Editor, **Business and Economic Review,** College of Business Administration, The University of South Carolina, Columbia, S.C. 29208.

Published in Oct., Nov., Dec., March, June, and July by The University of South Carolina as a service for those interested in business and economic matters.

This month's cover. Robotics, one of the many growing areas of technological expertise offered in South Carolina's TEC schools to aid industry in the Information Age. For a look at other ways the TEC system is meeting this challenge, see article beginning on page 7, this issue. For first-hand information on how the governmental, financial, and industrial sectors are faring, see articles on pages 4-6 and 16-22.

Information Management, Technology, and Policy: An Introduction

By Sena Hoosenally Black

The Institute of Information Management, Technology and Policy is particularly pleased to have this opportunity to dedicate a series of articles to the management of information technology in business and government. With the emergence of the Information Age, computer and communications technologies have become an integral part of most governments and companies, large and small. Consequently, information is rapidly being recognized as an organizational asset that must be carefully planned and managed if the productivity potential of these technologies is to be realized.

Mrs. Sena Hoosenally Black is an Information Resources Specialist for the Institute of Information Management, Technology and Policy of the College of Business Administration at The University of South Carolina. She received her B.A. Degree from Wellesley College and her M.A. Degree from the University of Michigan at Ann Arbor. Mrs. Black specializes in policy analysis and management issues related to information technology. She is the author of **The Information Technology Planning Process in South Carolina State Government,** which delineates a strategic planning methodology for information systems for the state. Most recently, she was project manager of a study of information technology and productivity designed to develop a comprehensive and statewide information resources management strategy.

In this, and last month's, issue of the **Business and Economic Review,** some of the major challenges posed by the increasing use of information and communication technologies in our society are highlighted. Together, these articles reflect two broad perspectives for understanding the use and management of information technology in government and business: concepts and applications. The April issue of the **Review** included four articles that delineated key management and technology considerations central to any business or government as it adjusts to the Information Age. In "Strategies and Tools in Transition," Dr. Donald A. Marchand, Director of the Institute of Information Management, Technology and Policy, explained the significance of managing information and traced its evolution from the era when information management was equated to paper work and forms control to a current focus on managing information as a strategic organizational asset. Within this framework, a cornerstone of the information management function is strategic planning for information systems, and this author presented an analysis of that function in "Strategic Planning: An Overview." Here she briefly explored the evolution of the information systems planning function, and outlined the characteristics essential for its success. Sara Schechter-Schoeman explored yet another critical information management function, contingency planning, in her article "Safeguarding Your Data Center." In large organizations, this concern with security is especially relevant, and will become increasingly so as our dependence on technology becomes ubiquitous.

EDITOR'S NOTE: This issue of the Business and Economic Review is dedicated to the Institute of Information Management, Technology and Policy, College of Business Administration, The University of South Carolina. We are especially grateful to Mrs. Sena Hoosenally Black, an Information Resources Specialist for the institute, for coordinating this venture. The institute was created to serve as a resource center for research and service activities that will improve the management of information resources and increase productivity. Its programs include investigative studies and publications, consultative services that respond directly to specialized needs and concerns, briefing and training seminars for continuing education needs, and clearinghouse and referral services based on a specialized library of national and international resources. Anyone wishing additional information on the Institute of Information Management, Technology and Policy, or particular issues related to the management and use of information technology, is invited to fill out and return the self-addressed post card included in this issue of the Business and Economic Review.

Finally, of the many technologies integral to the Information Age, none is more promising than that of office automation. In "Getting Started in Office Automation," William Kettinger described the major office automation technologies, from word processors to telecommunications, and suggested guidelines for implementation.

In this issue, the **Business and Economic Review** will continue its look at information management and technology by presenting four articles by senior managers on the specialized applications of information technology in diverse sectors of the South Carolina economy: state government, education, manufacturing, and banking. While these topics by no means exhaust the many uses of information technologies or the scope of the issue involved, they do illustrate key trends in the management and use of information technology that will become increasingly significant in the near future. They concern matters that business and government will find difficult to ignore in the decade of the '80's, but they also represent major opportunities for the future, opportunities that must be anticipated and propitiously captured.

Managing Information Resources in South Carolina State Government

By Larry L. Hamilton and Ted L. Lightle

INTRODUCTION

The concept of managing information as a valuable resource has had sporadic popularity in management circles the last two decades. Since the late 1970's, however, the troubled international economy and the explosive growth of information processing technology has caused increased interest in information resource management (IRM) in both public and private sectors. Proliferation of computer-based technology into all areas of today's organizations has expanded the complexity of defining and budgeting information resources.

By sharing its experience with the private sector in developing strategies and methods for improving IRM, South Carolina state government found more similarities than differences. The paragraphs following show how state government in South Carolina is making the transition to an IRM-oriented environment.

THE WHAT AND WHY OF IRM

Some observers believe that information can be created only in the human mind, or can exist only in the human mind. They argue that data is not information until it is useful. It is a rare manager who has not felt besieged by an overload of useless (and costly) data. A sure sign of failure in information systems is the recurring generation of data that is neither used nor useful. The IRM strategy emerging in South Carolina reflects the traditional concern for getting the right information to the right people at the right time.

Corporate managers and government officials have begun experimenting with new approaches to

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organization, training, and management. Their goals are to achieve optimal use and control of the emerging innovative technologies that make up the most volatile component of information resources.

". . . South Carolina [state government] is making the transition to an IRM-oriented environment."

IRM IN SOUTH CAROLINA STATE GOVERNMENT

Establishing an IRM-oriented environment in government touches almost every facet of public sector management, and requires careful evolution rather than revolution. A series of key events has been preparing South Carolina for such a transition since 1974. South Carolina's receipt of federal funds mushroomed in the 1960's, straining the state's oversight ability. In response, in the 1970's, the General Assembly enacted laws and initiated research projects to improve fiscal accountability, fiscal oversight, and management procedures for state resources. These efforts were characterized by a new focus on ensuring that each project be subjected to managerial critique and performance evaluation.

In 1981, the General Assembly enacted the first piece of legislation that defined "data processing," "telecommunications," and "office systems technology" as "Information Technology" (IT). Chapter 35 of Title 11 of the State Code of Law, this Model Procurement Code or Consolidated Procurement Code requires the Division of General Services to develop a "state plan for the management and use of information technology." The underlying premise is that properly managed technology, prudently applied, can improve productivity **without** increasing personnel costs.

To implement the code, certain IT functions, which previously were performed by other sections of the State Budget and Control Board, have been reassigned to General Services. Those areas principally responsible are the Materials Management Office and the Office of Information Resource Management.

The transition to an IRM environment on the massive scale required by state government also requires an unprecedented educational effort at virtually every level. State employees must understand that a purposeful transition is taking place, that they are part of it, that their contributions are needed, and that each of them may have an opportunity to acquire new skills. They need to understand what goals the state is attempting to achieve and why. In addition, they should be able to see how their own jobs fit into the transition.

To make the educational process easier, the Division of General Services established a Research and Training Section to provide general orientations (1-3 full days) for nontechnical personnel on the role of modern technology in South Carolina state government. Instructors provide hands on training in the use of the multifunction computer terminals that support the office automation hardware and software being installed in several state agencies.

A second educational effort was accomplished through the Information Technology Planning Office. All state agencies were asked to develop an Information Technology Plan, for review by the IT Planning Office. An **IT Planning Manual** was published containing guidelines and simple formats for agency personnel to follow, and training seminars were held to emphasize the major points. These agency plans are to serve as important statements of IT needs in the master plan for IT.

The IT Planning Office is also charged with several tasks important to the implementation of the procurement Code's IRM-related sections. It is to assist agencies in the development of IT plans, be responsible for preparation of the master plan, and publish technical standards for office automation. The IT Planning Office staff is available to provide technical advice and assistance to agencies.

Steps are underway to streamline and reduce the cost of public procurement through greatly expanded use of term contracts for IT commodities. The IT procurement specialists play an important role by keeping a finger on the pulse of the high technology marketplace and the financing options associated with it, and by keeping track of surplus IT in state agencies. Automated tracking and inventory procedures are being developed to help manage and track surplus, as well as all other IT, equipment more effectively.

"A sure sign of failure in information systems is the recurring generation of data that is neither used nor useful."

Several major projects that help illustrate the state's approach to IRM are the Legislative Printing Project, the Division of General Services Office Productivity and Automation Project, and the State Plan on Technology. The Legislative Printing Project has already resulted in a significant improvement in productivity and a major reduction in the annual cost of printing. In the past, bills, acts, resolutions, daily calendars and

journals for both Houses of the Legislature, and committee reports were prepared manually, then typeset and printed commercially. With the installation of a sophisticated word processing system, staff members are now able to prepare original work and make changes much more efficiently.

The Division of General Services Office Productivity and Automation Project (OPAC), begun in late 1981, is to

> report to the General Assembly . . . a plan to enhance office productivity and reduce personal service costs through the use of advanced office and information technologies.

The Institute of Information Management, Technology and Policy in The University of South Carolina's College of Business Administration served as a consultant on this project. The Division of General Services' operations were studied to identify areas where implementing office automation technology would make improvements in employee productivity. From this prestudy, the functional needs for automated office equipment were identified, a Request For Proposal (RFP) was prepared and published, and a contract for hardware and software eventually was awarded. A detailed poststudy will also be conducted to assess productivity improvements. In a second study, a statewide survey of information technology needs and concerns was conducted to assess the productivity potential of these technologies in state agencies and to define a comprehensive and statewide strategy to help achieve that potential.

The state's Master Plan, the State Plan on Technology (SPOT), has two major components. The first is the proposed development of an integrated statewide microwave communications network to carry video, data, voice, and radio transmissions. It is estimated that such a network could provide a potential net savings of nearly $400 million between 1983 and 2007.

"State employees must understand that a purposeful transition is taking place, that they are part of it . . . they should be able to see how their jobs fit into the transition."

Development of the microwave network is being managed by the Division of General Services in coordination with the Educational Television Commission. This network would support the state's goals in office automation by, among other things, allowing workers to exchange information between terminals and use electronic mail statewide. It would provide more economical alternatives to the leasing of data circuits and telephone lines from common carriers, and would allow the state to take advantage of integrated switching technologies when these devices come into mass production.

The second major component of SPOT is a proposed prototype high-speed link between the computer center at the Division of General Services and another major data processing (DP) center. This project, called the SCN (Shared Communications Network), would complement the microwave network because microwave can be used to carry data between DP centers. After the prototype is established and studied during 1983, other centers may join the SCN. One result will be to make modern computing resources economically available to smaller state agencies. Today, most state agencies do not have direct access to modern computing. With the SCN, however, for the cost of a terminal, printer, line charges, and access time, an agency will be able to use a large computer's capabilities, without having to build its own DP office.

Several advisory groups have been formed under the leadership of the Division of General Services to pursue issues related to the microwave network, the SCN, and OPAP. Some of the issues under scrutiny are (1) disaster recovery sites for DP centers; (2) physical security standards for DP centers; (3) security and privacy standards and procedures for electronically-stored data during storage, use, and transmission; (4) communications protocol and technical standards to promote the exchangeability of data and text among computer terminals statewide; (5) ergonomics, training, and personnel classification issues related to implementing technology in the office; and (6) making the information resources of state government economically available to local governments.

CONCLUSION

In such a dynamic and transitional environment, mistakes will occur, and the course may appear erratic at times. The development of a comprehensive long-range Master Plan, however, should minimize the potentially disruptive impacts of mistakes and unforeseen developments by providing unity of purpose and consistency in direction. The final measure of the state's success in implementing an IRM program, of course, will be how much it helps the state maintain or expand present levels of public service in the face of a continuing decline in revenue growth rates.

Information Technology and Technical Education

By Jack A. Powers

In late 1979, rapid technological changes in business and industry prompted the South Carolina State Board for Technical and Comprehensive Education (TEC Board) to develop a plan of action called "Design for the Eighties." Through visits with such corporations and research facilities as IBM, Digital Equipment Corporation, Texas Instruments, General Electric, Cincinnati Milicron, United Technologies, and others across the United States, and consultation with leaders in business and industry in South Carolina, the TEC Board determined that there were five subject areas of critical need: Computer Applications, Robotics, Microelectronics, Advanced Office Occupations, and Advanced Machine Tool Technology.

To provide statewide leadership in these fields, the board established Resource Centers in each subject on existing TEC campuses. A sixth center, the Water Quality Institute, was added through a grant from the Department of Health and Environmental Control. The primary objective of the Resource Centers was to become the nucleus and catalyst for statewide faculty updating, curriculum change, and business and industry workshops and seminars.

Although all of the Resource Centers deal with information technology, this article will focus on just one: the Computer Applications Resource Center located at York Technical College at Rock Hill. This center was given the responsibility for investigating computer academic applications in nontraditional areas and for expanding traditional data processing applications.

The staff of the Computer Applications Resource Center visited the computer centers of businesses, industries, colleges, and universities, and attended national conferences and workshops. Then they surveyed the local technical colleges to discern what use was already being made of computers. They concluded that the South Carolina TEC System needed a coordinated distributed computer network. This conclusion developed into a proposal for a statewide system called TECNET, a concentrated effort to upgrade every major curriculum area by making computing resources available as a tool for classrooms, shops, and labs. (Up until this time, the TEC System had shared a large mainframe computer with the State Department of Education, but demand for both administrative and academic data processing within the TEC System had grown to the point that access to the DOE host was no longer sufficient.)

The Computer Applications Resource Center compiled a task analysis detailing all the computer functions needed for academic purposes in the TEC System. Using this information, statewide peer group meetings were held to confirm the functions that had been identified. Another group, consisting of experts in administration, data processing, and word processing met to determine appropriate levels of computer support needed in those areas. It was at this point the TECNET concept was formulated as a coordinated distributed computer network. It would utilize the mainframe in Columbia and a system of compatible micro- and minicomputers on the local campuses to network into each other. The proposed network would be based on five criteria.

1. Usability	The end-user and the task that user is learning would be of highest priority.
2. Compatibility	Software developed for an application at one college could be used at others with no conversion.

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The Office Automation Resource Center at Midlands TEC has focused on word processing as the core for office automation. WANG, IBM, Lanier, and DEC are the four vendors whose equipment is available in the center.

3. Expandability	The system could grow to serve more users or additional applications with no conversion, and minimal changes in support devices.
4. Flexibility	The system could support such diverse applications as word processing, graphics, data processing, and computer assisted instruction.
5. Maintainability	System hardware and software could be maintained by a minimal number of vendors. In addition, staff could be trained and upgraded with minimal difficulty.

The network would consist of three components.

1. **Central Mainframe Host.** The host computer would maintain the vital roles of statewide network communication control, batch processing support, administrative database support, management information support, and statistical analysis. This component would be expanded whenever it was consistent with the overall purpose of this plan.
2. **Local College Minicomputer Systems.** The minicomputer would support the local network, maintain communications with the host, support interactive simulations and languages for academic applications and key-to-disk data entry, and provide data storage for operational administrative applications.
3. **Microcomputer User Work Stations.** The microcomputer-based work station would support heavy-use applications, such as word processing, graphics, and computer literacy. This design would minimize the impact of diverse applications and work stations on the minicomputer. Each of these work stations would be networked into the local minicomputer and thus have access to the entire repertoire of software in both the local minicomputer and the host system.

The potential functions of the micro, mini, and mainframe in the TECNET were identified as

Microcomputer

Data Entry
Interactive Programming
Data Storage
Gaming
Simulation
Word Processing
Analog/Digital Development
Machine Tool Control

Low Resolution Graphics
Computer Assisted Instruction
Test Banks

Minicomputer

Data Entry
Interactive Programming
Program Compiling
Program Testing
Data Storage
Small Systems Development
Management Information
High Resolution Graphics
Communications and Network
Management
Word Processing
Simulation
CAI
Test Banks
Library Administration

Mainframe

Database Management
High Volume Batch Compiling
High Volume Batch Testing
Management Information
Statistical Analysis
Mass Data Storage
Communications & Network
Management
On Line Query
Interactive Administration

With the proposed system, the host would continue in its role as network controller, with each of the local minis networked into that central site. The host would continue supporting the student records database, high-volume batch compiles for students, and the Management Information System (MIS). Since it would not be practical to expect the host to support the ever growing interactive requirements, that would be accomplished as much as possible on the local minis and micros. The local minicomputer would provide network control on the respective campus for the micros and other terminals. The minis would maintain communications with the host, provide local data storage and interactive capabilities to the user, and support institutional administrative functions. The micro would complete the system by providing the user with as much capability as economically feasible, independent of the minis and mainframe. Each micro would be networked into the local mini so that functions not available on the micro could be served by the mini or passed along to the host.

If TECNET is implemented, it is anticipated

Students at Piedmont TEC receive instruction on the Cincinnati Milacron T-3 Industrial Robot. The T-3 is one of the most widely used robots in industry.

that minicomputers and peripheral devices would be needed in virtually every TEC college, with each one tied to the DOE host via communication links. This network should be comprised of three sizes of minicomputers, ranging from minimum size (for colleges with an enrollment of less than 2,500) to large capacity (for colleges with an enrollment in excess of 8,000). Further, to insure standardization, it was decided that all three sizes should be purchased from a single vendor so that they will be totally compatible in hardware and software. This will facilitate sharing of system resources, and allow growth potential with minimal software conversions.

The entire complement of systems was put out on bid, and a three-year term contract was won by Digital Equipment Corporation. Using the TECNET concept as supporting documentation for Title III proposals, colleges in the TEC System were awarded Federal grants, and purchased over $2.5 million worth of computer equipment with more to be purchased next year.

The Computer Applications Resource Center has a DEC VAX/750 which is already installed and in use. Shared training sessions are being held, and center personnel are serving as consultants for TECNET installations at other TEC colleges. Savings in training cost and quantity discounts in hardware and software purchases have amounted to more than $500,000 this fiscal year.

During the three-year procurement period, each of the TEC colleges in the system will phase in components and replace obsolete equipment as they address new applications. The computer labs and intelligent stand-alone terminals and micro-based work stations of the TECNET System will allow TEC to meet the interactive academic requirements as well as the necessary administrative functions.

While TECNET may not be the answer to all the computing needs and requirements of the TEC System, it is a coordinated, future-oriented plan for keeping all of our technologies updated. It is an indication that the TEC System is committed to relevant technical training in current and future jobs for the people of South Carolina.

Resource Centers

For additional information, call or write . . .

Judy Hancock
Advanced Office Occupations Center
Midlands Technical College
Columbia, SC
738-1400

Vito Fiore
Microelectronics Resource Center
Tri-County Technical College
Pendleton, SC
646-8361

Tony Bledsoe
Water Quality Institute
Sumter Area Technical College
Sumter, SC
773-9371

Jim Rehg
Robotics Resource Center
Piedmont Technical College
Greenwood, SC
223-8357

Charles Granger
Advanced Machine Tool Technology Resource Center
Greenville Technical College
Greenville, SC
242-3170

Dennis Merrill
Computer Applications Resource Center
York Technical College
Rock Hill, SC
324-3130

The Employer and Employment Laws

By James J. Baldwin, LL.D.

The Employer and Employment Laws is a regular feature. Suggestions and inquiries by readers are invited.

THE HIDDEN PITFALLS BEHIND PLANT CLOSINGS OR RELOCATIONS

Because of today's economy, more and more company officials are being forced to consider plant closures or relocations of operations. While such efforts to become more competitive are a legitimate management prerogative, employers should be aware that plant closings and relocations must be handled properly or they can result in costly legal proceedings.

Because plant closures and relocations are becoming more common, and because the effects of such actions can be so severe, many governmental bodies are taking actions to discourage this type of activity. States are enacting statutes and municipalities are enacting city ordinances to regulate plant closures and relocations. More importantly, the National Labor Relations Board is dealing harshly with employers who do not comply with its new and still-developing requirements. Company officials must be aware of these laws and regulations in order to reach proper business decisions. This article will summarize some of the complex legal issues involved in closing and/or relocating business facilities.[1]

As mentioned above, several states have enacted statutes that regulate plant closings and relocations. Typically, these statutes require an employer who contemplates such action to notify local government officials of his intentions, to notify employees, and to describe the reasons for taking such action. Some also require payment of severance benefits according to a specified formula. Various penalties for failing to comply with the statutes also are provided.

The Maine plant closure statute,[2] which was among the first to be enacted, is fairly typical. It provides that any "commercial or industrial facility" that employs or has employed 100 or more employees during the preceding 10 months and that "terminates business or relocates more than 100 miles distant," must give 60 days' notice to the Director of the Bureau of Labor, to its employees, and to local officials. There is a $500 penalty for failure to satisfy the notification requirements. The Maine statute also requires an employer to provide severance pay to each employee in the amount of one week's pay for each year of employment by the employee.[3] The Maine statute is significant because, being one of the first, it has been, and will likely continue to be, used as a model for other states.

The City of Philadelphia has also passed an ordinance, similar to the Maine statute, regulating plant closures or relocations.[4] It applies to any employer who has employed 50 or more individuals and operated in the city for more than 6 months prior to the proposed date of closing or relocation. It requires employers to give 60 days' notice of a closing or relocation to the city's Director of Commerce, all employees, and any employee organization. In addition, the employer must provide detailed information concerning the number of employees to be affected, the wages paid, and the amount of local taxes paid. The ordinance also allows local courts to enjoin a plant closure or relocation for up to 60 days if the employer has intentionally failed to give proper notice. If a plant has already been closed or relocated, the court can order the employer to pay full wages to all affected

[1]This article does not purport to deal with all legal issues management faces when considering closing, relocating, or transferring business operations. Although this article does deal with some significant legal issues all companies must face in their capacities as employers, management officials should be aware that there are other employment-related matters that must be considered. For example, the Multi-Employer Pension Plan Amendments of 1980 will affect some employers considering a plant closure or relocation. This and other issues are not addressed herein.

[2]**Me. Rev. Stat.**, Title 26, § 625-A.

[3]To receive severance pay, an employee must have worked for the employer for at least three years and must be one who has not accepted employment at the new location. Furthermore, any contractual severance formula supersedes the statutory formula.

[4]**Philadelphia Code**, Title 9, § 1500, **et seq.** (amended June 1982).

BUSINESS AFFILIATES

The Business Affiliates program of The USC-Business Partnership Foundation, chartered in 1977, is designed to attract business investment and participation in the programs of the College of Business Administration. Advantageous to both, this program benefits the business community through better prepared graduates and higher levels of professionalism of employees who participate in the graduate or continuing education programs, and the college through a new sense of relevancy and realism from corporate and business involvement.

Membership funds supplement university appropriations and provide for faculty development, student aid, and program and research support, as well as development of a professional business library within the college. It is the foundation's hope that this will prove to be an ever-expanding partnership program for the college and the business community.

Those interested in participating in the Business Affiliates Program can obtain further information by calling or writing:

J. Stanley Fryer,
Associate Dean for Development
College of Business Administration
The University of South Carolina
Columbia, SC 29208
(803) 777-2910

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The R. L. Bryan Company
Budweiser of Columbia, Inc.
Burlington Industries, Inc.
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Canron Railgroup
Carolina Energies
Celanese Corporation
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Clarkson, Harden & Gantt
Clinton Mills
Coca Cola-Greenville
Colgate Palmolive Company
Collins & Aikman Corporation
Colonial Life & Accident Insurance Co.
Cone Mills Corporation
Continental Can Company, Inc.
Coopers & Lybrand
Corning Glass Works
Dan River, Inc.
Daniel International
Defender Industries
Deloitte, Haskins & Sells
Derrick, Stubbs & Stith
Elkay Industry
Elliott, Davis & Company
Ernst & Whinney
First-Citizens Bank & Trust Company of S.C.
First Federal Savings & Loan Assoc. of Camden
First Federal Savings & Loan Assoc. of Charleston
First National Bank in Orangeburg
First National Bank of S.C.
First Palmetto Bank & Trust
Fluor Corp. (Daniel International)
Frances Ley Springs Foundation, Inc.
Geiger, McElveen & Kennedy
General Electric Co.
General Telephone & Electronics Corp.
Gerald R. Callahan
Greenwood Mills
Greenwood Packing Company
Greenwood Savings & Loan Association
Gregg-Graniteville, Inc.
Hergeth, Inc.
Horsman Dolls, Inc.
Industrial Store Managers Association
Inman-Riverdale Foundation
International Business Machines Corp. (IBM)
Intex Products, Inc.
Jeff Hunt Machinery Company
The Keenan Company
Kimberly-Clark Corp.
Korf Industries
Kresge Foundation
Levi-Strauss & Co.
Lexington County Savings & Loan Assoc.
The Liberty Corporation
Lips Doran
Lockwood-Greene Engineers
MacEwen and McGregor
Mayfair Mills
C. C. McGregor & Company
Merrill Lynch, Pierce, Fenner & Smith, Inc.
Multimedia, Inc.
Mutual Savings & Loan Association of Greenwood
National Bank of South Carolina
North Carolina National Bank
Oneita Knitting Mills
Owens Corning Fiberglas Corp.
Peat, Marwick, Mitchell & Company
Peoples Federal Savings & Loan Association
PepsiCo, Inc.
Price Waterhouse & Company
Reeves Brothers, Inc.
Republic National Bank
Richtex Corporation
Riegel Textile Corporation
Security Federal Savings & Loan Assoc.
Seibels Bruce & Company
Self Foundation
Singer Foundation
J. E. Sirrine Company
Smith, Sapp & Company
Sonoco Products Company
S. C. Electric & Gas Company
S. C. Federal Savings & Loan Association
S. C. National Bank
Southern Bank & Trust Company
Southern Bell Telephone & Telegraph Co.
Spartan Foods
Springs Mills, Inc.
Standard Federal Savings & Loan Association
Standard Life
State-Record Company
Synalloy Corporation
Union Carbide Corporation
Uniroyal, Inc.
U. S. Shelter Corporation
W. R. Grace
Wachovia Bank & Trust Company
Wellman Industries, Inc.
Westinghouse Educational Foundation
Wilbur Smith & Associates

employees for up to 60 days.

Although not many states and municipalities have enacted such laws, a much larger number have considered, or have pending, plant closure legislation. A recent memorandum of the National Association of Manufacturers reports that bills are pending in 16 states.[5] Some of the bills are much more extreme than the Maine statute. For example, a bill introduced in Oregon[6] would require any business that employs at least 100 employees to give 6 months' notice to employees, labor organizations, state and local elected officials, and the state Economic Development Board any time it contemplates a "full or partial closure or relocation of a workplace," if such action would reduce the number of employees by 20 percent. The bill also would require any employer who has a "reduction in operations" to "make [his] operating and financial records" available to his employees' representative and to local elected officials. Furthermore, the employer "shall provide to each affected employee income maintenance payments equal to 85 percent of the employee's average wage during the one-year period immediately preceding the reduction in operations." Such payments continue only for the length of time during which notice of the reduction in operations was not given as required. The bill would require the employer to pay also an amount equal to 85 percent of the annual taxes paid by the business operation, unless the move is to a place outside the state, in which case he would pay 300 percent of the annual taxes. Finally, a penalty of $1,000 per affected employee would be levied against an employer who "intentionally" fails to comply. Efforts to discourage relocations by levying "penalty" taxes could become popular, particularly in the heavily industrialized states of the Northeast and Midwest which are experiencing a high incidence of plant closures and relocations.

Although these types of state and local laws can cause problems for employers, they are generally easier to deal with than rules developed by the National Labor Relations Board (Board). In recent years, the Board has developed a line of cases that makes plant relocations very costly under certain circumstances.

Board law regulating plant closures and relocations generally applies only to unionized operations and the employer's duty to deal with the union. The National Labor Relations Act (Act) makes it unlawful for an employer to "refuse to bargain collectively" with the union representing his employees,[7] and also provides that neither party to an existing union contract is required to bargain about subjects covered in the contract until it expires.[8] Applying these two provisions of the Act, the Board has concluded that under certain circumstances an employer cannot remove work from a unionized location during the term of a collective bargaining agreement without first obtaining the consent of the union.

The Board's most publicized application of these principles to date came in **Los Angeles Marine Hardware Co.**[9] In that case, the Board ruled that an employer violated the law when he relocated his business operations from a unionized facility to a nonunion facility. The Board reasoned that the relocation amounted to a midterm modification of the collective bargaining agreement, an action prohibited by Section 8(d) of the Act. This was true even though the employer bargained in good faith to impasse and was not motivated by antiunion animus. The Board's position was upheld by the U.S. Court of Appeals for the Ninth Circuit in **Los Angeles Marine Hardware Co. v. NLRB.**[10]

Armed with court approval, the Board set out to apply its newly formed theory to analogous situations. In **First National Maintenance Corp.,**[11] the Board ruled that an employer who provided janitorial services on a contract basis unlawfully terminated his contract with a nursing home since he had not bargained over the decision to do so with his employees' union. The Supreme Court, however, rejected this position.[12] The Court

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[5] **Legal Memorandum of the Labor Law Advisory Committee,** National Association of Manufacturers (December 1982).

[6] Oregon Senate Bill No. 830.

[7] 29 U.S.C. § 158(a)(5).

[8] 29 U.S.C. § 158(d).

[9] 235 NLRB 720 (1978).

[10] 602 F. 2d. 1302 (9th Cir. 1979).

[11] 242 NLRB 462 (1979).

[12] **First National Maintenance Corp. v. NLRB,** 452 U.S. 666, 101 S.Ct. 2573 (1981).

treated the contract termination as a partial plant closure, and held that an employer was not required to bargain over a decision "to shut down part of the business purely for economic reasons." As a result of this decision, an employer may **close** all or part of his operation without bargaining with the union.[13] However, in a now famous footnote, the Court explained that its decision applied only to closures; it was not expressing any view as to whether bargaining would be required over decisions to sell, relocate, automate, or subcontract.[14] Thus, the Court left the Board free to address sales of businesses, plant relocations, and automation of production in light of its **First National Maintenance** decision.

By now, the Board's position on these questions is becoming clear. For example, in **National Car Rental System,** the Board ruled that an employer need not bargain over his decision to sell a part of his business.[15] However, the Board has consistently taken the position that an employer must bargain with the union over a decision to relocate a plant or transfer work from one plant to another. If there is no union contract in effect at the time bargaining takes place, the company is required to obtain the union's agreement or bargain to impasse.[16] If there **is** a union contract in effect, the company does **not** have the option of bargaining to impasse. It must obtain the union's consent before implementing the desired change.[17]

One important factor that appears in each of the Board's decisions concerning plant relocations during the term of a contract is the employer's desire to escape high contractual labor costs. The Board has made special note of this factor in each case, and in a recent report, the General Counsel for the Board clearly indicated that the desire to avoid contractual terms is a key element in determining whether an illegal midterm modification has occurred.[18]

Another important factor is whether or not the union has "waived" its right to bargain over the decision to relocate work. In effect, this waiver, as the Board calls it, simply amounts to bargaining prior to the decision and obtaining union consent, via a provision in the collective bargaining agreement, to allow the company to make such a decision any time during the term of the agreement. These "waivers," however, must be very clear, otherwise, the Board will require the employer to obtain union consent.[19]

The above-discussed cases suggest that this area of law is complex, and it is. The Board addresses these plant relocations on a case-by-case basis. Therefore, the facts of each case become extremely important. Because of the potentially disastrous consequences an adverse ruling can have on the company, management would be well advised to plan carefully any relocations. A few examples will serve to demonstrate the types of remedies that have been imposed by the Board.

In **Los Angeles Marine Hardware Co.,** the Board did not require the company to reopen its closed facility. Because the new facility was reasonably close to the old facility, the Board simply ordered the company to offer reinstatement with full back pay to all employees who had worked at the old facility. These wages were paid in addition to the wages paid to the company's new employees at the new location, and were paid to the old employees even though they had performed no services for the company. Thus, the company's effort to save on labor costs was a total failure.

Other employers have been hit even harder by the Board. The employers in **Illinois Coil Spring Co., Tocco Div. of Park-Ohio Industries, Inc.,** and **Brown Co.,** in addition to reinstating employees and granting back pay, were ordered to reestablish their former operations. This included transferring trucks back to the old location; transferring manufacturing operations, including machinery, back to the old location; and transferring assembly operations back to the original plant. The Board has continued this practice in recent decisions.[20]

Another remedy the Board has been pursuing with zeal in recent months comes in the form of injunctions against employers who attempt midterm relocations. Under Section 10(j) of the National Labor Relations Act, the General Counsel may seek to obtain a temporary restraining order or injunction to enjoin unfair labor practices. Similar relief can be granted to a union under

[13]Of course, a partial closing can still be unlawful if it was motivated by antiunion sentiment. **United Textile Workers v. Darlington Mfg. Co.,** 380 U.S. 263 (1965).

[14]101 S.Ct. at 2584 n.22.

[15]252 NLRB 159 (1980).

[16]**Armour Oil Co.,** 253 NLRB 1104 (1981); **Lee Norse Co.,** 247 NLRB 801 (1980).

[17]**Illinois Coil Spring Co.,** 265 NLRB No. 28 (1982); **Tocco Div. of Park-Ohio Industries, Inc.,** 257 NLRB 413 (1981); **Brown Co.,** 243 NLRB 769 (1979).

[18]**General Counsel's Quarterly Report,** 112 LRR 61 (1983).

[19]**Illinois Coil Spring Co.,** 265 NLRB No. 28 (1982); **Tocco Div. of Park-Ohio Industries, Inc.**

[20]**F. Landon Cartage Co.,** 265 NLRB No. 177 (1982) (company ordered to reopen trucking terminal); **Maletta Contracting,** 265 NLRB No. 161 (1982) (company ordered to restore trucking operation, even though many of its trucks had been sold).

Section 301 of the Labor-Management Relations Act. Based primarily on the Ninth Circuit's decision in **Los Angeles Marine Hardware Co. v. NLRB, supra,** federal district courts are granting such injunctions.[21] If such relief is granted, a company cannot transfer or relocate its business until either the contract expires[22] or it prevails on the unfair labor practice charges.

As the foregoing discussion suggests, a company cannot enter into a plant closure or relocation lightly. In addition to state and local laws regulating such actions, many employers will have to consider the position of the National Labor Relations Board. By analyzing recent developments in the law and carefully planning the proper course of action, a company can avoid some serious consequences.

[21]**E.g., Kobell v. Cameron Mfg. Co.**, No. 82-1383 (M.D. Pa., December 29, 1982); **Zipp v. Bohn Heat Transfer Group**, No. 82-2139 (C.D. Ill., June 22, 1982).

[22]For this reason, management may want to rethink the practice of obtaining or agreeing to long-term, multiyear contracts.

Information Management and Productivity in Industry: The Alumax Experience

An Interview With Michael G. Kazeef by Sena Hoosenally Black*

INTRODUCTION

Alumax of South Carolina, Inc., one of the newest primary aluminum reduction plants in the world, was designed to embody the latest in technology. This is evident not only with respect to manufacturing facilities, but also in terms of an information system that supports production, quality control, and administration.

This interview with Michael G. Kazeef, Vice-President and General Manager of Alumax, focuses on the information system as used by management. This particular system is unique because it represents a highly innovative and advanced concept of data processing where **information,** not just technology, is managed. The terms that are often used to describe such a system, which represents the most advanced stage of the management of information, are "embedded processing" and "information or knowledge management."

INTERVIEW

Q. Mr. Kazeef, could you give us a description of your information system.

A. Here at Alumax we have two mini-computers with 80 CRTs clustered around the plant. Both are on-line interactive data base computers designed to support multiple users. The first computer's database deals with purchasing, accounts payable, inventory, supplies, raw materials, and the maintenance functions of planning, warehousing, and labor distribution. The second computer has multiple databases for production reporting, payroll/personnel, shipping and billing, and financial reporting.

In a traditional data processing environment, users can only inquire data within certain parameters, and then usually without the ability to do anything with the data. Here, users can access any database (with the exception of very sensitive areas) through the use of a series of menus and produce information as needed. In other words, within limits, users can look at almost anything that is there and use the data to do their job smarter. The users can do their "reporting" and they don't have to ask a trained programmer to help them.

They also have the ability to use more sophisticated data combinations, as well as various graphic displays of the data. If a manager wants to check his projections by cross-referencing his data with some actual maintenance data, he can do that, too. He doesn't need to ask anybody, or prepare a report or memo: he can simply recall the data in the desired format.

There is, therefore, a more personal interest in the data. This is an extension of distributed processing, or a "fishbowl database" approach. We

*The author would also like to express her appreciation to Fynn DeHay, MIS Manager at Alumax, for his assistance with this article.

encourage the use of data processing from people who are actually managing the day to day operations, and that includes absolutely all levels of management.

In this way, users have basic ownership and knowledge of the data and can spot errors very quickly. In other words, they **manage resources** as opposed to being in charge of a specific task. The computer is there to support the activity, to help the person, and to provide timely decision making information.

Q. This system appears to be not only user-oriented, but also user-controlled. Are there any obstacles to this nontraditional approach to the use of computers in management?

A. There were at first, because our early users had come from different environments, and at least half of them were very reluctant to have others look at "their" data. It was important at that point, therefore, to make sure people realized it was not exclusively "their data," but rather a part of the plant operation.

Another obstacle in the beginning was the fact that we have basically no clerks here at Alumax. That level was eliminated because the information system supports that type of operation. So the buyers, the accountants, the planners, the maintenance foreman, and the production supervisors enter information on line. We believe the best person to enter data, to verify data, is the person closest to it. True, if you look at that function as a keypunch operation, you can get distressed. But, if you see it as putting your seal of quality into that database, then you realize that it is the best insurance possible, not only for the company as a whole but also for your respective area.

Admittedly, it is fairly easy to set up this type of system in a completely new plant. I am the first to recognize that it would be more difficult in an existing company.

Learning to use the system, however, is **not** difficult! As far as doing a given job, all that's needed is a couple of days' training. To become proficient, perhaps a week at the very most.

Q. How many of your administrative personnel use this system?

A. All of our administrative and support personnel use it, i.e., our buyers, accountants, engineers, metallurgists, maintenance planners, warehousemen, and shipping and traffic personnel, among others.

Q. What do you feel are the major benefits of this system?

A. Basically, there are three. First, since each individual has access to all of the data related to his work, the information system really becomes an extension of the imagination, freeing the user to view the whole picture with an eye for improvements. In this way, the business professional is encouraged to grow in his job.

This motivation, in turn, can affect the way the whole organization works. With this type of information system, there is more accurate input and better decisions. This system is very flexible and keeps on improving as people identify needs for changes and help the organization to be efficient constantly. That, in my opinion, is an endless process.

Third, because we have very minimal clerical and supervisory personnel, we have been able to hold our total work force to only 640, as opposed to the average of 900 normally required for a plant of this size. This alone has saved us more than $8 million/year.

We have also seen a steady decline in costs, since our people are able to work with each other to do a better job as a team. There's no question that the use of data for fast access, for comparison, for trying out alternatives produces these steadily improving results.

Q. Do you feel that the concept of your information system is one that would be applicable to other organizations, including those outside of manufacturing environments?

A. Absolutely. There is nothing specific about manufacturing in our plant. It is basically an improved data processing system that makes possible more accurate data, greater ease of feedback, and ready access to data to all personnel

Michael G. Kazeef is Vice-President and General Manager of Alumax of South Carolina. A native of Paris, France, he is a graduate of Paris University with a Master's Degree in Chemical Engineering. For eight years prior to his South Carolina assignment, Kazeef was Vice-President and Plant Manager of a large aluminum smelter in the Pacific Northwest; and between 1969 and 1971, he was part of the construction, start-up, and operational group responsible for a new aluminum smelter in Maryland. Prior to coming to the United States, Kazeef was associated with aluminum plant operations in Greece and France.

for decision making. Therefore, its flexibility could fit almost any organization

Q. Looking back, what do you feel was the key ingredient in implementing such a system?

A. For us, the most important aspect was the involvement of users in the actual design and implementation of the system. Traditionally, a user is handed a system by programmers. He may check from time to time, and the final product may not be exactly what he wants. With our system, we can determine our own success. The user is the architect: the successes and the failures are nobody's responsibility but his.

Q. At the time you were establishing this plant, you must have had many objectives. How important was this information system in relation to your other responsibilities?

A. Thank you for leading me into saying something I think is very important! Data processing is often perceived as being a minor function, and suffers very much from that inferior status. Here at Alumax, we made the information system one of our top priorities since good information is the basis for good decisions.

In any new plant, you have people who need training, equipment that does not work when it should, and potential serious start-up maintenance problems. If a key block of the total problem can be removed, the start-up will become much more manageable. That key block is maintenance. With an efficient, planned maintenance system that spots problems before they occur; maintains a good maintenance history; and provides information on what equipment should be checked and when, what's in the warehouse, automated work orders, and records of what's been done, what's broken down, and what should be modified, you can remove 55 percent of all your start-up problems.

We had a very successful start-up, and got into operation quickly. I credit a large part of that to our information system.

Q. Mr. Kazeef, what you appear to have is an organizational culture based on a firm belief that people will be productive if they are supported. You have provided that support by bringing computer power to your managers and supervisors with almost no holds barred. Is that an accurate assessment of your approach?

A. I think the word "culture" is very accurate and reflects itself in many ways: in people's attitudes, pride, and attention to detail and quality. That's a culture, and there's no question that it exists. Our information system is an integral part of our culture. It is one effort among many others, such as careful attention to safety and productivity. The plant now owns that culture. If people do well, it's because they want to, not because they have to.

We often read about job satisfaction. I think this system, because of its friendliness and absence of middle men, achieves that. How you do your job, how much more you can do, is completely up to you. We have several ways of measuring or observing people's successes and we've tried to reflect that in compensation as well as other things. That aspect, however, is just a nice reminder that efforts are appreciated and not ignored. What is central is solid pride in becoming a higher level professional. The information system definitely helps create and maintain that professionalism.

Information Resource Management in Banking

By Thomas G. Ash

With federal deregulation and increased competition, the banking industry has undergone significant changes in recent years. Complementing a strong capital base, it has made significant strides in the use of information technology to address its marketplace and internal productivity challenges. Today the use of information and information technology forms the cornerstone of the array of new customer products and delivery systems.

Information technology is also at the core of the operating productivity improvements achieved over the last decade. Thus, there is a growing recognition on the part of banking executives that information is a vital resource to the organization.

As such, effective information resource management and planning is, and will continue to be, a prime factor contributing to the success and profitability of banks.

THE MARKETPLACE — CUSTOMER PRODUCTS AND DELIVERY SYSTEMS

The integration and creative use of information resources is playing a vital role in the development of innovative bank products and service delivery systems. With the passage of the Depository Institutions Deregulation and Monetary Control Act of 1980 and the Garn-St. Germain Depository Act of 1982, banks have been served notice that the rules of the marketplace will continue to change at an ever-increasing pace. If banking is to remain profitable, the generic package of banking services that once sufficed will have to be replaced by an array of services that appeal to the customer in both convenience and value.

One major step in this direction was the institution of 24-hour banking through Automated Teller Machines (ATMs). It is readily apparent that today's banking customer is very sophisticated in his financial dealings. As money becomes more valuable, the customer desires more control over his financial assets, including accessibility to funds. The Automated Teller Machine meets this need and provides the place and time of convenience to the customer.

ATMs, however, are more than pieces of equipment conveniently placed in strategic market locations. They also represent information resources cleverly packaged in an effective bank delivery system. Through the integration of the bank's data processing capability and its data communication network, customers are able to withdraw cash, make deposits, transfer funds between accounts, make payments, and inquire about their account balances at electronic speeds. In effect, therefore, the ATM has become an extension of the branch system, offering checking services 24 hours a day.

ATMs have been growing in customer acceptance over the last three years. Transaction volumes have grown steadily, at the rate of approximately 20 percent per year, while financial institutions nationwide plan to increase ATM installations by as much as 50 percent over the next two years. The success of ATM service also has laid the foundation for the development of regional and national ATM interchange networks. Through the interconnection of computer systems and data communication networks, customers will be able to conduct financial transactions with their own asset cards literally anywhere in the country. From this base, the next stage in the evolution of delivery systems will capitalize on the technical facilities already in place by extending transaction services to the point of sale in retail outlets and to the home with home banking services.

Information management is also assisting bank management in focusing on a more fundamental issue affecting its marketplace. Labeled "Relationship Banking," this concept means that the bank knows the customer in the entirety of his business relationship, instead of segmenting his services into a number of nonrelated account information pockets. To accomplish this, banks use sophisticated software systems to extract pertinent information elements from various bank systems, and synthesize these data into a comprehensive customer information data base. With the "Central Information File," which is linked to operating offices through telecommunication facilities, tellers and platform officers are better equipped to provide more personalized services to their customers.

These control information file systems are also becoming the foundation of planning systems for marketing and pricing. A good illustration of this activity is the effort being made by banks to design services tailored to the "upscale" customer. The upscale customer is the more affluent bank customer who is interested in the integrated planning and management of his financial affairs, and is receptive to investment and credit service packages designed to meet those needs. Because this customer segment contributes approximately 80 percent of the banks' retail revenues and profits,

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"upscale" customer packages are being introduced at banks of all sizes. As they mature, these services help not only to maintain and attract a very important customer base, but also to establish a new foundation for fee-based services to supplement earnings.

"Today the use of information and information technology forms the cornerstone of the array of new customer products and delivery systems [in the banking industry]."

Finally, the use of information resources to provide service to the commercial or wholesale customer who is the "bread and butter" of the banking industry is a significant factor. With inflation, the corporate treasurer is keenly aware of the opportunity cost of idle funds and therefore makes a diligent effort to optimize his return on funds available. To address this need, banks have developed an array of sophisticated cash management services integrating the use of data processing facilities, telecommunication networks and office systems. The emphasis is on the collection and timely dissemination of information regarding corporate cash assets. Today, the corporate treasurer can have a terminal on his desk that is linked through telecommunication facilities to the computers and financial software of numerous banks in the country. At the press of a terminal button, the cash position and availability of funds is instantaneously displayed with a menu of investment alternatives for available funds. With this service, the corporate treasurer is in a better position to obtain an optimum return on his financial assets and thereby to contribute to the corporate bottom line.

INTERNAL PRODUCTIVITY

Although the creative use of information resources to service the marketplace is in an incipient stage, information technology has been successfully employed by banks for years to improve the productivity of their internal operations. One area of note is the labor intensive check processing function where productivity gains have been achieved largely by leveraging technology against costly staff expansion. In the early 1970's, a major consulting group engaged by the American Bankers Association estimated that 33 billion checks were being processed annually by the banking industry. They predicted this volume would increase at an annual compounded growth rate of 7 percent. They further postulated that the expense associated with handling this heavy volume of paper would be more than banks could afford. Therefore, banks would be forced to resort to intensive use of electronic technology to create the "checkless/paperless" society.

Fortunately or unfortunately, as the case may be, the "checkless" society has never matured as consumers and businesses continue to rely heavily on paper checks as the primary payment mechanism. However, the use of information technology to facilitate payments is widely used by banks and other payment systems processors. Today, complex computer-based check-capture systems process millions of checks daily. Moreover, sophisticated computer simulation models analyze check float and clearing destinations, thereby providing information to control the availability of funds.

On a broader front, Automated Clearing Houses (ACH) located throughout the country electronically process and exchange governmental and private sector payroll and payment transactions. Finally, a number of banks are experimenting with the truncation of checks at the bank of first deposit. Under this concept, check information is captured at the bank of initial deposit and subsequently transmitted electronically to other points in the payment system, saving both time and transportation expense. Thus, information resources have had a profound impact on the check processing function in particular, and the payments system in general.

This premise is substantiated by the findings of a study recently conducted by the Federal Reserve Bank. Their research indicated that the growth rate of checks began to taper off in 1974 and has been approximating only a 5 percent annual growth rate since that time. With the expanded use of information technology-based systems such as ATMs, home banking, point-of-sale devices, and corporate-to-corporate payment systems, the Federal Reserve predicts that a zero growth rate in check usage could conceivably result by 1990.

"Information technology is at the core of the operating productivity improvements achieved over the last decade."

The productivity gains demonstrated in the check processing area will have to be equaled in the other internal operating areas of the bank if profitability levels are to be sustained. Banks can expect to experience significant growth in staff, paper, and operating facilities as they respond to economic growth and the increasing demands of a competitive marketplace in the next decade. According to a recent study conducted by a major computer hardware vendor, banks employed 1.5 million people in 1980 at a cost of $24.3 billion. If present operating trends continue, 2.6 million employees will be required to support bank operations by 1990 at a projected cost of $74.8 billion. In a similar vein, banks processed 47.7 billion paper items in 1980 at a cost of $17.8 billion. Predictions for 1990 provide for the processing of 81.6 billion items at a projected cost of $60.8 billion. Finally, banks operated 53,500 offices in 1980 at a cost of $24.7 billion. In 1990, 83,200 offices will be required at a projected expense of $99.8 billion.

The awesome nature of these projections has prompted the banking industry to take a long, hard look at the issue of productivity and cost-effective operations. With billions of dollars invested in data processing facilities, telecommunication networks, and office systems, banks are already hard at work engineering more advanced solutions using these information resources to reduce the costs associated with staff, paper, and operating facilities. For example, major efforts are underway to automate the bank branch facility. Using automated manned teller machines connected to the bank's mainframe computer, the labor-intensive manned teller line is being streamlined. The paper-intensive back office operation is also being automated through the use of the newer office automation systems which result in lower personnel, data entry, and transportation costs. To complement these productivity improvements, banks will place increasing emphasis in the future on replacing costly "brick and mortar" branches with less expensive, automated "self-service" branches equipped to satisfy a wide variety of banking service needs.

The much heralded concept of office automation is gaining acceptance as bankers attempt to increase both clerical and professional productivity. These systems are not only being used for standard word processing tasks, but when integrated with information generated from the data processing system, they are also streamlining inter-office communications and management reporting. In the professional sphere, the introduction of inexpensive microprocessor and business graphic technology has produced a powerful new resource to assist management in planning and controlling the use of banks' financial resources.

A FINAL PERSPECTIVE

In the October 1979 issue of **InfoSystems** magazine, John Diebold wrote, "the organizations that will excel in the 1980's will be those that manage information as a major resource." These words apply particularly to banking. As a whole, the banking industry has managed its information resources effectively to achieve business objectives. Although successful in this endeavor, the use and integration of information resources by banks has generally been more of a reactive response to marketplace and expense-control stimuli than an adoption of a comprehensive, corporatewide information resource management philosophy. To the credit of bank executives, the recognition of information as a valuable corporate asset is becoming more widespread, but this recognition has not yet permeated the entire organizational structure and can only be considered the initial step in the evolution of a true information resource management concept.

". . . effective information resource management and planning is, and will continue to be, a prime factor contributing to the success and profitability of banks."

Although technology is important, there is an increasing awareness that information technology is only a tool to be blended into an overall information resource management concept that encompasses the entire spectrum of the information collection and dissemination processes of the corporation. Accordingly, the strategic planning once shunned by banks is finding new popularity as senior bank managers attempt to integrate longer range planning for information resources and corporatewide business plans. From an organizational perspective, steering committees composed of senior management from all operating divisions are being appointed and charged with the responsibility of planning the use of information resources to meet business needs. Finally, bank managers are beginning to demand more objective analysis and measurement methods to assess both costs and paybacks associated with the use of information resources.

A Tradition of Professional Development of the Highest Quality

The Daniel Management Center is the focal point for continuing management education and professional development within the University of South Carolina's College of Business Administration.

Each year, thousands of executives, managers, staff specialists and other professionals from private business, industry and government agencies participate in seminars, conferences, short courses, workshops and briefing sessions conducted in Columbia and other cities under the Center's sponsorship.

The Daniel Management Center takes a practical and job-oriented approach to continuing education. Therefore, it has become a valuable resource to organizations concerned with development of their human resources. Seminars and courses ranging from one day to several months in duration are offered to meet the diverse needs of many different interest groups.

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You are invited to take advantage of the learning opportunities provided by the Daniel Management Center to enhance your professional competence and improve the effectiveness of your organization.

A Sample of Fall Programs

All programs will be conducted in the Center, on the eighth floor of USC's College of Business Administration, unless otherwise noted.

Fall 1983 CPA Review
August 1 — October 27, a 104-hour course

Speaking Skills for Lawyers
August 10 and 11

Speaking Out With Confidence
August 16 and 17

Positive Customer and Client Relations
August 18 and 19

Taking the Mystery out of Data Processing and Computers
August 23 and 24 (Columbia)
September 8 and 9 (Charlotte)
September 23 and 24 (Charleston)

Assertiveness Training
August 23-25

Developing Word Processing Skills
August 24 and 25

Advanced Secretarial Seminar
August 30 and 31 (Columbia)
September 20 and 21 (Charlotte)

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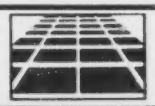

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The Management Bookshelf

By Dwight Gardner, Business Librarian, M.B.A., M.S.L.S.

The Management Bookshelf is a service to our readers provided by the Elliott White Springs Library of the College of Business Administration of The University of South Carolina.

THE COMING REVOLUTION IN SOCIAL SECURITY
by A. Haeworth Robertson
Reston Publishing Co.
11480 Sunset Hills Rd.
Reston, VA 22090
1981, 376 pp., $19.75

Robertson, a former Chief Actuary for Social Security, analyzes the problems with the present social security system, and warns of the dangers of its rapidly rising costs and the public's unrealistically high expectations. He proposes a new program called the Freedom Plan which would provide income security while allowing a greater freedom of choice.

INVESTING WITHOUT BORDERS: THE BEST OPPORTUNITIES AROUND THE WORLD FOR THE EIGHTIES
by Adrian Day
Alexandria House
1300 N. 17 St.
Arlington, VA 22209
1982, 294 pp., $14.95

Arguing that it is not prudent to allow all of one's assets to be controlled by a single group of politicians, the author presents a wide range of potential overseas investments. He covers the international stock markets, foreign currencies, commodities, banks, real estate, and insurance, and explains the workings, respective merits, and legal restrictions of each.

MIND OF THE STRATEGIST: THE ART OF JAPANESE BUSINESS
by Kenichi Ohmae
McGraw-Hill Book Co.
1221 Ave. of the Americas
New York, NY 10020
1982, 283 pp., $16.95

This volume analyzes the factors behind the success of Japanese business, dispelling the myths and concentrating on the facts. He contends that their methods of creative and strategic thinking can be applied to almost any type of business.

MANAGING TERRORISM: STRATEGIES FOR THE CORPORATE EXECUTIVE
Edited by Patrick Montana and George Roukis
Greenwood Press
88 Post Rd. West, Box 5007
Westport, CT 06881
1983, 182 pp., $27.95

This book presents strategies for preparing personnel and property for possible terrorist attacks, methods for developing executive protection plans, and techniques for negotiating with terrorists. It also includes a directory of organizations that provide services and information on terrorism.

INTEGRATED MANAGEMENT SYSTEMS
by F. Grant Schutte
(Reviewed by Dr. J. D. Phillips of the University of Alabama)
Butterworths Publishers
10 Tower Office Pk
Woburn, MA 01801
1981, 168 pp., $15.00

The author explains how managers should carry out their duties and responsibilities by pointing out the two essential tasks of a manager: effectiveness and efficiency. In this context, Schutte discusses strategic planning, management planning and control, and operational control.

* * *

Readers are invited to submit titles of books that they wish to call to the attention of others.

STATISTICAL INDICATORS OF SOUTH CAROLINA BUSINESS

ITEMS	January 1983	January 1982	Latest Month Percentage Change From Year Ago
Total Bank Deposits ($ millions)	$8,035.8	$6,537.2	+ 22.9
Demand	3,207.4	3,028.5	+ 5.9
Time	4,828.4	3,508.7	+ 37.6
Total Bank Loans ($ millions)	N.A.	N.A.	—
Savings in Savings and Loan Associations ($ millions)	$6,225.0	$5,782.7	+ 7.6
Sales and Use Tax Collections ($ thousands)	$72,297.9	$68,735.9	+ 5.2
Labor Market:			
Civilian Labor Force (thousands)	1,473,800	1,409,200	+ 4.6
Employment	1,302,700	1,245,300	+ 4.6
Rate of Unemployment (percentage)	11.6	11.6	0
Nonfarm Wage and Salary Employment (in thousands)	1,140.0	1,163.2	- 2.0
Manufacturing	348.6	379.4	- 8.1
Contract Construction	9.7	9.6	+ 1.0
Transportation and Public Utilities	53.6	53.7	- 0.2
Wholesale and Retail Trade	223.5	223.8	- 0.1
Finance, Insurance, and Real Estate	49.3	47.5	+ 3.8
Services, Mining, and Miscellaneous	167.5	163.8	+ 2.3
Government	232.9	232.2	+ 0.3
Average Hourly Earnings, All Manufacturing (in dollars)	$6.87	$6.63	+ 3.6
Initial Unemployment Claims Filed in South Carolina	125,509	125,569	a
Placements by South Carolina Employment Offices (nonagricultural)	3,750	3,410	+ 10.0
Indexes of Prices Received by Farmers (1977=100)			
All Farm Products	128	122	+ 4.9
All Crops	160	149	+ 7.4
Livestock and Products	88	87	+ 1.1
S.C. Parity Ratio	81	79	+ 2.5
New Motor Vehicle Registrations			
Cars	7,689	5,995	+ 28.3
Trucks	2,316	1,888	+ 22.7

	January 1983	January 1982	First Month 1983	First Month 1982	First Month Percentage Change
Valuation of Building Permits Issued ($ millions)					
Total for all S.C. Counties	$118.3	$171.6	$118.3	$171.6	- 31.1
Available County Data					
Aiken	2.5	1.0	2.5	1.0	+150.0
Berkeley	4.6	1.9	4.6	1.9	+142.1
Charleston	15.3	47.9	15.3	47.9	- 68.1
Dorchester	3.0	1.3	3.0	1.3	+130.8
Lexington	6.8	5.9	6.8	5.9	+ 15.3
Richland	13.9	15.6	13.9	15.6	- 10.9
Greenville	11.8	18.9	11.8	18.9	- 37.6
Pickens	1.6	.6	1.6	.6	+166.7
Spartanburg	4.5	3.0	4.5	3.0	+ 50.0

[a]Less than one-half of 1 percent.

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